

<213> Homo sapiens

<400> 1988

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<210> 1989

<211> 10795

<212> DNA

<213> Homo sapiens

<400> 1989

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<212> PRT

<213> Homo sapiens

<400> 1990

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Arg Trp Gln Ser Leu Leu	Asn Phe Asn Ser Gln	Arg Arg Leu Leu Leu
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 Leu Leu Gln Gly Gly Asp Glu Lys Lys Val Asn Leu Val Leu Gly Asp  
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 Gly Arg Ser Leu Gly Leu Thr Ile Arg Gly Gly Ala Glu Tyr Gly Leu  
 115 120 125  
 Gly Ile Tyr Ile Thr Gly Val Asp Pro Gly Ser Glu Ala Glu Gly Ser  
 130 135 140  
 Gly Leu Lys Val Gly Asp Gln Ile Leu Glu Val Asn Gly Arg Ser Phe  
 145 150 155 160  
 Leu Asn Ile Leu His Asp Glu Ala Val Arg Leu Leu Lys Ser Ser Arg  
 165 170 175  
 His Leu Ile Leu Thr Val Lys Asp Val Gly Arg Leu Pro His Ala Arg  
 180 185 190  
 Thr Thr Val Asp Glu Thr Lys Trp Ile Ala Ser Ser Arg Ile Arg Glu  
 195 200 205  
 Thr Met Ala Asn Ser Ala Gly Phe Leu Gly Asp Leu Thr Thr Glu Gly  
 210 215 220  
 Ile Asn Lys Pro Gly Phe Tyr Lys Gly Pro Ala Gly Ser Gln Val Thr  
 225 230 235 240  
 Leu Ser Ser Leu Gly Asn Gln Thr Arg Val Leu Leu Glu Glu Gln Ala  
 245 250 255  
 Arg His Leu Leu Asn Glu Gln Glu His Thr Thr Met Ala Tyr Tyr Leu

1518

690		695		700
Glu Ala Ala Arg Ile Ile Ala Glu Ala Phe Lys Thr Lys Asp Arg Asp				
705		710		715
Tyr Ile Asp Phe Leu Val Thr Glu Phe Asn Val Met Leu				720
	725		730	

<210> 1993  
 <211> 957  
 <212> DNA  
 <213> Homo sapiens

<400> 1993  
 nngaaaacct acgggatgac acgtgccctc gatcacatcg acatcgccat cccagctggc  
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 cagtcgggtcg ccgtcatggg gccgtccggg tcaggcaaga ccaccctgct gcactgcttg  
 120  
 tcggggatcc tctcgctga ctccggcagt atcgaactgg ctctgccgga ccgcaccgtc  
 180  
 aacgtcgaaa acctctctaa cgaaggccga gcaaagctac gccgtcaatc ccttggtttc  
 240  
 gtcttccaac aaggaatgct cgtacccgag ctactgctg tcgagaacac cgccctaccc  
 300  
 ctcattgctta acggcgtatc ccaaaccgat gcggtcaggt atgccacca atggcttgaa  
 360  
 tcgatggggg taggcggcat ggaggatcgt cggattgggt agctctccgg gggccaagct  
 420  
 caacgcgtca ctattgcccg gtcccaggta atcgatccgt cgattgtctt cgctgacgaa  
 480  
 cccaccggag cctcgcactc agccaccgcc gtcgaagtca tggccattct gcttccggcg  
 540  
 acgaccgggc ggggacgcac cctcgtcgtc gtcacccatg acgaggacgt tgcccggcgc  
 600  
 tgccagcgca tccttcatct gcacgacggg cggatcgtct ctgaccacgt acgtcattcc  
 660  
 gatgggaggt ggtgatcatg actataacgc cccctatcga accgggaacc gccgatcaaa  
 720  
 ggatcccgtc cctccccgtc cccgagcccc tgggagctac gcccggaagt cttaccactg  
 780  
 ctgcgatcct cagcatgacc ctccgtgcct cagccgctga ccactccacc tggcggttgc  
 840  
 cggtagtgtc ttctcgtgtc attgcaacca tcattctcga cgtcactggc ggtgccgtca  
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 tgatgtggca tctaccggga gacaactctg gcttctacaa gctgacctcg acaattg  
 957

<210> 1994  
 <211> 224  
 <212> PRT  
 <213> Homo sapiens

<400> 1994  
 Xaa Lys Thr Tyr Gly Met Thr Arg Ala Leu Asp His Ile Asp Ile Ala  
 1 5 10 15  
 Ile Pro Ala Gly Gln Ser Val Ala Val Met Gly Pro Ser Gly Ser Gly

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<210> 1995
<211> 285
<212> DNA
<213> Homo sapiens
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<400> 1995
catcaccacc attatcaaca ccatcatcac caccattatc acctttatca ccaccatcat
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caccatcacc accatcatca ctaccaccat cagcggccatc atcatgtgat gactctcaat
120
actgtcctca tcatgtgtga cttggactgt ggaccagccc ctggggctct gctctgctga
180
cctatatctt ttgtctcttg ttcctgagaa gctgggagtt gagacccagt aagggtgttgt
240
acagacactt gtgaccccaa attccatgag acagaggacc tcccn
285

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<210> 1996
<211> 59
<212> PRT
<213> Homo sapiens
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<400> 1996
His His His His Tyr Gln His His His His His Tyr His Leu Tyr
 1          5          10          15
His His His His His His His His His His His Tyr His His His Ala
 20          25          30
His His His Val Met Thr Leu Asn Thr Val Leu Ile Met Cys Asp Leu

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35 40 45  
Asp Cys Gly Pro Ala Pro Arg Ala Leu Leu Cys  
50 55

<210> 1997  
<211> 313  
<212> DNA  
<213> Homo sapiens

<400> 1997  
ccgctggtgg tgggtgctgct gattggcatg gccatctata ccttccgcaa gaaagacctg  
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ggcaagctgc acaagccggt cagcatcggc cggcgcgaga tgctggtggg gctggccatc  
120  
ggtggcggca tcggttttta cgacggcctg ttcggggccgg gtaccggcag tttcctgatg  
180  
ttcctgttcg tgcggttttt gcgttttgat ttcttgcatg cttctgccgc ggccaaggtt  
240  
gtcaacctgg ccaccaatgt ggcggcactg tgctttttca ttcccagcgg caatgtgctg  
300  
tatggctacg cgt  
313

<210> 1998  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 1998  
Pro Leu Val Val Val Leu Leu Ile Gly Met Ala Ile Tyr Thr Phe Arg  
1 5 10 15  
Lys Lys Asp Leu Gly Lys Leu His Lys Pro Val Ser Ile Gly Arg Arg  
20 25 30  
Glu Met Leu Val Gly Leu Ala Ile Gly Gly Gly Ile Gly Phe Tyr Asp  
35 40 45  
Gly Leu Phe Gly Pro Gly Thr Gly Ser Phe Leu Met Phe Leu Phe Val  
50 55 60  
Arg Phe Leu Arg Phe Asp Phe Leu His Ala Ser Ala Ala Ala Lys Val  
65 70 75 80  
Val Asn Leu Ala Thr Asn Val Ala Ala Leu Cys Phe Phe Ile Pro Ser  
85 90 95  
Gly Asn Val Leu Tyr Gly Tyr Ala  
100

<210> 1999  
<211> 399  
<212> DNA  
<213> Homo sapiens

<400> 1999  
ccgcggcgca agttggaatg gcaaaacatt ttcattcccc gcgagcaagg tagcttgagt  
60  
tccactgcgc agaggggcaga tgtgaagtac tccggtactg ttcattttac cggtgttggc  
120

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<210> 2000
<211> 91
<212> PRT
<213> Homo sapiens
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<210> 2001
<211> 1434
<212> DNA
<213> Homo sapiens
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BNSDOCID. &lt;WO\_\_\_0058473A2\_1\_&gt;

agggaccaca agggccggac cgcactcttc ctggccacgg agcgcggctc tactgagtgt  
 600  
 gtggaggtgc ttacagccca cggcgccctct gccctcatca aggagcgcaa gcgcaagtgg  
 660  
 acaccctgc acgccgctgc tgcctctggc cacactgact ccctgcactt gctgatcgac  
 720  
 agtggggaac gagctgacat cacagatgtc atggatgcct atggacagac cccactgatg  
 780  
 ctggccatca tgaatggcca tgtggactgt gtacatctgc tgctagagaa aggatccaca  
 840  
 gctgatgctg ctgacctccg gggccgcact gccctccacc gcggggcagt gactggctgt  
 900  
 gaggactgcc tggctgccct gctggaccac gacgcatttg tgctgtgccg agactttaag  
 960  
 ggccgcacgc ccattcacct ggcctcagcc tgtggccaca ctgcagtact gcggaccctg  
 1020  
 ctgcaggctg ccctttccac agatcccctg gatgccgggg tggattacag cggataactg  
 1080  
 cccatgcact gggcctccta cactggacat gaagattgtc tggagttggt acttgaacac  
 1140  
 agcccgtttt cgtacctgga aggaaacccc ttcactcctt tgcactgtgc agtgattaat  
 1200  
 aaccaagaca gcaccacaga gatgctactg ggagctctgg gtgccaagat tgtgaacagc  
 1260  
 cgagatgcca aaggacggac ccccttcac gccgctgcct tcgcggaaca tgtctctggg  
 1320  
 ctccggatgc tgctgcagca tcaagctgag gtgaacgcca ctgaccacac tggccgcact  
 1380  
 gcgctcatga cggcggctga gaacgggcag accgctgctg tggaatttct gctg  
 1434

<210> 2002  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

<400> 2002  
 Xaa Asn Glu Gly Arg His Asn Leu Leu Ile Ser Ser Ala Ala Asp Trp  
 1 5 10 15  
 Arg Arg Asp Lys Phe Gly Arg Thr Pro Leu His Tyr Ala Ala Ala Asn  
 20 25 30  
 Gly Ser Tyr Gln Cys Ala Val Thr Leu Val Thr Ala Gly Ala Gly Val  
 35 40 45  
 Asn Glu Ala Asp Cys Lys Gly Cys Ser Pro Leu His Tyr Ala Ala Ala  
 50 55 60  
 Ser Asp Thr Tyr Arg Xaa Ser Gly Thr Pro Tyr Thr Phe Gln Pro  
 65 70 75

<210> 2003  
 <211> 688  
 <212> DNA  
 <213> Homo sapiens

<400> 2003



ntcattgacta cggagacact gaagaaaatt cagattgata ggcagttttt cagcagatgtg  
 60  
 attgcagata ccattaagga gttgcaagat tcggccactt acaacagtct cctgcaagct  
 120  
 ttgagcaaag agagggaaaa caaatgcat ttctatgaca tcatttccag ggaggaaaaa  
 180  
 ggaagaaaac agataatatt acttcaaaaa cagctaatta atttcaaaaa ggaatggcaa  
 240  
 tttgaagtcc agagtcagaa tgagtatatt gctaacctca aggaccaact gcaagagatg  
 300  
 aaggcaaaat ccaacttgga gaatcgctac atgaaaacca ataccgagct gcagattgcc  
 360  
 cagacccaga aaaagtgtaa cagaacagag gaactcttgg tggaagagat tgagaaactc  
 420  
 aggatgaaaa ccgaagaaga ggcccggact catacagaga ttgaaatgtt ccttagaaaag  
 480  
 gagcagcagg tgggtcccca cagcttttct atgctttgac tttttttttg tactctgctt  
 540  
 atactgagga aacaaaaaga atattttgaa ggaaaaccaa ccatcattct ttcagcctaa  
 600  
 tgaactttag ctcatgtttt ctttcagggt tatgcatctg aatagatatc ttatatagct  
 660  
 gtaatttgag agagtgcagg taaaattg  
 688

&lt;210&gt; 2004

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2004

Xaa	Met	Thr	Thr	Glu	Thr	Leu	Lys	Lys	Ile	Gln	Ile	Asp	Arg	Gln	Phe
1				5					10					15	
Phe	Ser	Asp	Val	Ile	Ala	Asp	Thr	Ile	Lys	Glu	Leu	Gln	Asp	Ser	Ala
			20					25					30		
Thr	Tyr	Asn	Ser	Leu	Leu	Gln	Ala	Leu	Ser	Lys	Glu	Arg	Glu	Asn	Lys
		35				40						45			
Met	His	Phe	Tyr	Asp	Ile	Ile	Ser	Arg	Glu	Glu	Lys	Gly	Arg	Lys	Gln
	50					55					60				
Ile	Ile	Ser	Leu	Gln	Lys	Gln	Leu	Ile	Asn	Phe	Lys	Lys	Glu	Trp	Gln
65				70					75					80	
Phe	Glu	Val	Gln	Ser	Gln	Asn	Glu	Tyr	Ile	Ala	Asn	Leu	Lys	Asp	Gln
			85					90					95		
Leu	Gln	Glu	Met	Lys	Ala	Lys	Ser	Asn	Leu	Glu	Asn	Arg	Tyr	Met	Lys
		100						105					110		
Thr	Asn	Thr	Glu	Leu	Gln	Ile	Ala	Gln	Thr	Gln	Lys	Lys	Cys	Asn	Arg
	115					120						125			
Thr	Glu	Glu	Leu	Leu	Val	Glu	Glu	Ile	Glu	Lys	Leu	Arg	Met	Lys	Thr
	130				135						140				
Glu	Glu	Glu	Ala	Arg	Thr	His	Thr	Glu	Ile	Glu	Met	Phe	Leu	Arg	Lys
145				150				155						160	
Glu	Gln	Gln	Val	Gly	Pro	His	Ser	Phe	Ser	Met	Leu				
			165						170						

<210> 2005  
<211> 354  
<212> DNA  
<213> Homo sapiens

<400> 2005  
gctagcacca agccaagggt atgtttcctt gcttgcattg ggggtttctg gccagtcagc  
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caagtgaact gattgacccc cagccctgtg gggaatttca ggggggtatt gtcttggtca  
120  
tcggagtcag ggggtggcctt tnagccaagg ctgcattaac ttttgggaaa agaaatggga  
180  
agcccgccgt gtcacagggt ctcctgaccg gctgggtagg gtttggcctt atcttacagc  
240  
cagtgtgtg tttgtcaga tggacgcaca tggaaaccag gctaggatca tcttcccaat  
300  
gtctactccc tgctttggtc tgtcctgaaa acaattgcaa agacattgtg gctg  
354

<210> 2006  
<211> 111  
<212> PRT  
<213> Homo sapiens

<400> 2006  
Met Phe Pro Cys Leu His Val Gly Phe Leu Ala Ser Gln Pro Ser Glu  
1 5 10 15  
Leu Ile Asp Pro Gln Pro Cys Gly Glu Phe Gln Gly Gly Ile Val Leu  
20 25 30  
Val Ile Gly Val Arg Gly Gly Leu Xaa Ala Lys Ala Ala Leu Thr Phe  
35 40 45  
Gly Lys Arg Asn Gly Lys Pro Ala Val Ser Gln Gly Leu Leu Thr Gly  
50 55 60  
Trp Val Gly Phe Gly Leu Ile Leu Gln Pro Val Leu Cys Leu Leu Arg  
65 70 75 80  
Trp Thr His Met Glu Thr Arg Leu Gly Ser Ser Ser Gln Cys Leu Leu  
85 90 95  
Pro Ala Leu Val Cys Pro Glu Asn Asn Cys Lys Asp Ile Val Ala  
100 105 110

<210> 2007  
<211> 335  
<212> DNA  
<213> Homo sapiens

<400> 2007  
nnacgcgtgc catgtgcatg tgtatatgca tgtatgtgcg tatgtgtgtg catgtgtgtg  
60  
tgtatatgca tgtgtgtatg tgcattgtacg tgttngtgca tatgcgtgtg catgcatgcg  
120  
tgtgcgtatg tgtgcatann catgtgcaca catgtacaca cgtgtacatg ttcattgcatg  
180  
tgcacgtgca tatgtgtaca cgtgtatgcg tgtacatgta tgagcatatg tacacgtgtg  
240

gatgtgtgtg tatgcatgtg tgtgtgcaca gatatgcctt ttcctttcat acaggctggg  
300  
ttgagtattg ctggtaggca gggacaactt tccgt  
335

<210> 2008  
<211> 111  
<212> PRT  
<213> Homo sapiens

<400> 2008  
Xaa Arg Val Pro Cys Ala Cys Val Tyr Ala Cys Met Cys Val Cys Val  
1 5 10 15  
Cys Met Cys Val Cys Ile Cys Met Cys Val Cys Ala Cys Thr Cys Xaa  
20 25 30  
Cys Ile Cys Val Cys Met His Ala Cys Ala Tyr Val Cys Ile Xaa Met  
35 40 45  
Cys Thr His Val His Thr Cys Thr Cys Ser Cys Met Cys Thr Cys Ile  
50 55 60  
Cys Val His Val Tyr Ala Cys Thr Cys Met Ser Ile Cys Thr Arg Val  
65 70 75 80  
Asp Val Cys Val Cys Met Cys Val Cys Thr Asp Met Pro Phe Pro Phe  
85 90 95  
Ile Gln Ala Gly Leu Ser Ile Ala Gly Arg Gln Gly Gln Leu Ser  
100 105 110

<210> 2009  
<211> 288  
<212> DNA  
<213> Homo sapiens

<400> 2009  
gacatcacc cgtgtgtggc caaccccaac ggtttctccg cagcgatcga ggaactgggtg  
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ctgcgttccc cagcgacat cgacgtggtc gtcggcatgg aggctcgcgg ctctctcttc  
120  
gcagctccgg tcgccctggc catcggggca ggattcgtgc cgggtgcgcaa gccggggaag  
180  
ctccccggcc aggtgtattc cgagaccttt gccatggagt acggggagga gaccctcacc  
240  
gtccaccagt acgccatcaa gccgggggtcg cgcgtcatca tcgtcgac  
288

<210> 2010  
<211> 96  
<212> PRT  
<213> Homo sapiens

<400> 2010  
Asp Ile Thr Pro Leu Leu Ala Asn Pro Asn Gly Phe Ser Ala Ala Ile  
1 5 10 15  
Glu Glu Leu Val Leu Arg Ser Pro Arg Asp Ile Asp Val Val Val Gly  
20 25 30  
Met Glu Ala Arg Gly Phe Leu Phe Ala Ala Pro Val Ala Leu Ala Ile

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          35          40          45
Gly Ala Gly Phe Val Pro Val Arg Lys Pro Gly Lys Leu Pro Gly Gln
      50          55          60
Val Tyr Ser Glu Thr Phe Ala Met Glu Tyr Gly Glu Glu Thr Leu Thr
65          70          75          80
Val His Gln Tyr Ala Ile Lys Pro Gly Ser Arg Val Ile Ile Val Asp
          85          90          95

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<210> 2011  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

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<400> 2011
ctcgagcagt ctctgcatgt taacaccccc gtacggcccg taaagcataa ccgtctccga
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cttgccgccg cctgcggtgt tgcctaggcg gccgggtgaac ccacctgagg gccggatgta
120
gaagtcaacg gtggacgacg gggttgaggg tttgttgatt ggcgagtggg gaagcgagca
180
gattgtaaat tggtagaacg gggaacagag attagtcaca atgacgagaa cgacaacaga
240
atgttgattg ttatagccat ctctggagga gagggaaaaa gccaggtatc tagacagcga
300
aagcaaattg gagccgaggg gacagtgccg tccttcgttc ctcggaact cccacgaggc
360
accttccatt ctgtgggcag aatt
384

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<210> 2012  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

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<400> 2012
Met Glu Gly Ala Ser Trp Glu Leu Pro Arg Asn Glu Gly Arg His Cys
  1          5          10          15
Pro Leu Gly Ser His Leu Leu Ser Leu Ser Arg Tyr Leu Ala Phe Ser
      20          25          30
Leu Ser Ser Arg Asp Gly Tyr Asn Asn Gln His Ser Val Val Val Leu
      35          40          45
Val Ile Val Thr Asn Leu Cys Ser Pro Phe Tyr Gln Phe Thr Ile Cys
      50          55          60
Ser Leu Pro His Ser Pro Ile Asn Lys Pro Ser Asn Pro Ser Ser Thr
65          70          75          80
Val Asp Phe Tyr Ile Arg Pro Ser Gly Gly Phe Thr Gly Arg Leu Ala
      85          90          95
Lys His Ala Gly Gly Gly Lys Ser Glu Thr Val Met Leu Tyr Gly Pro
      100          105          110
Tyr Gly Gly Val Asn Met Gln Arg Leu Leu Glu
      115          120

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<210> 2013  
 <211> 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2013

gcgtatcccc acggctacgg catgaccgcg cttatcggcc cggacctgtc caccgtcgaa  
60  
gccttgctcg cccaggtcca cagcacacaa acccgggtgt acctggccaa tatcaatgcc  
120  
gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc  
180  
cgcggaacg gcgtcgccaa acgcttgccc gtcagcgtgc cgtcccattg tgcgctgctg  
240  
gaaaaacctg ccgaaacact ggcccaagcc ttcgctgaag tgacgctgaa aacgccnncn  
300  
nnnccnncn  
309

&lt;210&gt; 2014

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2014

Ala	Tyr	Pro	His	Gly	Tyr	Gly	Met	Thr	Ala	Leu	Ile	Gly	Pro	Asp	Leu
1				5					10					15	
Ser	Thr	Val	Glu	Ala	Leu	Leu	Ala	Gln	Val	His	Ser	Thr	Gln	Thr	Pro
			20					25					30		
Val	Tyr	Leu	Ala	Asn	Ile	Asn	Ala	Asp	Asn	Gln	Thr	Val	Ile	Ala	Gly
			35				40					45			
Ser	Asp	Gly	Ala	Met	Lys	Ala	Val	Ala	Asn	Leu	Val	Arg	Gly	Asn	Gly
	50					55					60				
Val	Ala	Lys	Arg	Leu	Ala	Val	Ser	Val	Pro	Ser	His	Cys	Ala	Leu	Leu
65				70					75					80	
Glu	Lys	Pro	Ala	Glu	Thr	Leu	Ala	Gln	Ala	Phe	Ala	Glu	Val	Thr	Leu
				85				90						95	
Lys	Thr	Pro	Xaa	Xaa	Pro	Xaa									
				100											

&lt;210&gt; 2015

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2015

acgcgtgcca tgctcggtat ccgccgccac caccctgtct ttgggaccgg cgagttcacc  
60  
gatctaggcg ggccggacat ggcagtgatg tccttcttac gtcacaacga gcacgaaacg  
120  
gtcctgtgcc tggetaatct ctccgatact gagcggacgg ttgcccttca ccttccacaa  
180  
ttcgcgggcg tggcgggctc ttctctcacc catggtcagg acgcgcaacc agtaaaagct  
240  
gacggaacac tgctccgtacc gttgtggcca tatggctatc gatggctgca gatgtccggt  
300

gaggagaggt catgaccgct tgggaagac  
329

<210> 2016  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 2016  
Thr Arg Ala Met Leu Gly Ile Arg Arg His His Pro Val Phe Gly Thr  
1 5 10 15  
Gly Glu Phe Thr Asp Leu Gly Gly Pro Asp Met Ala Val Met Ser Phe  
20 25 30  
Leu Arg His Asn Glu His Glu Thr Val Leu Cys Leu Ala Asn Leu Ser  
35 40 45  
Asp Thr Glu Arg Thr Val Ala Leu His Leu Pro Gln Phe Ala Gly Val  
50 55 60  
Ala Gly Ser Ser Leu Ile His Gly Gln Asp Ala Gln Pro Val Lys Ala  
65 70 75 80  
Asp Gly Thr Leu Ser Val Pro Leu Trp Pro Tyr Gly Tyr Arg Trp Leu  
85 90 95  
Gln Met Ser Gly Glu Glu Arg Ser  
100

<210> 2017  
<211> 457  
<212> DNA  
<213> Homo sapiens

<400> 2017  
accaaggtca gattcatggc ctcttttctt ccagcggcca gcaggaaacg cggggagccc  
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ttgatcatct ccgacatcaa gaaaggcagc gtggcacaca ggacgggcac cctggagcca  
120  
ggcgacaagc tactggccat tgacaatatc cgcctggaca actgccccat ggaggacgcc  
180  
gtgcaaattc tgcggcagtg cgaggacctg gtgaagctga agatccggaa ggacgaggac  
240  
aactctgatg agctggagac cacaggtgcc gtcagttaca cagtggagct gaagcgtac  
300  
gggggtcccc tgggcatcac catttcgggc acggaggaac cttttgacct cattttcatc  
360  
tcaggcctcc ccaaactgtg cctggctgag aggactggtg ccatccagtg ggggaaccgc  
420  
ttcggaccat aacaacttta ttctcaggga cggacca  
457

<210> 2018  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 2018  
Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys

1				5					10					15				
Arg	Gly	Glu	Pro	Leu	Ile	Ile	Ser	Asp	Ile	Lys	Lys	Gly	Ser	Val	Ala			
			20					25					30					
His	Arg	Thr	Gly	Thr	Leu	Glu	Pro	Gly	Asp	Lys	Leu	Leu	Ala	Ile	Asp			
		35					40					45						
Asn	Ile	Arg	Leu	Asp	Asn	Cys	Pro	Met	Glu	Asp	Ala	Val	Gln	Ile	Leu			
	50					55					60							
Arg	Gln	Cys	Glu	Asp	Leu	Val	Lys	Leu	Lys	Ile	Arg	Lys	Asp	Glu	Asp			
65					70				75					80				
Asn	Ser	Asp	Glu	Leu	Glu	Thr	Thr	Gly	Ala	Val	Ser	Tyr	Thr	Val	Glu			
			85					90					95					
Leu	Lys	Arg	Tyr	Gly	Gly	Pro	Leu	Gly	Ile	Thr	Ile	Ser	Gly	Thr	Glu			
		100					105						110					
Glu	Pro	Phe	Asp	Pro	Ile	Phe	Ile	Ser	Gly	Leu	Pro	Lys	Arg	Gly	Leu			
		115					120					125						
Ala	Glu	Arg	Thr	Gly	Ala	Ile	Gln	Trp	Gly	Asn	Arg	Phe	Gly	Pro				
	130					135					140							

&lt;210&gt; 2019

&lt;211&gt; 483

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2019

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&lt;210&gt; 2020

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2020

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Cys	Leu	Glu	Asn	Gly	Thr	Gly	Lys	Ala	Glu	Gly	Ile	Glu	Ile	Ser	Arg			
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<211> 797
<212> DNA
<213> Homo sapiens
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<210> 2022

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Gly Trp Ser Leu Pro Leu His Tyr Phe Gln Val Val Thr Trp Ala Val
      35          40          45
Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu
      50          55          60
Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp
65          70          75          80
His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp
      85          90          95
Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro
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Gly Pro Asp Tyr Val Pro Arg Ala Cys Arg Trp Ala Gln Trp Pro Leu
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Met Val Leu Ala Ser Pro Gly
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Asp Ser Pro Asp Glu Met Ala Pro Thr Ala Pro Arg Ile Ile Thr Val			
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His Ile Pro Val Asp Lys Ile Gly Glu Val Ile Gly Pro Lys Gly Lys			
50	55	60	
Met Ile Asn Gln Ile Gln Asp Asp Thr Gly Ala Asn Ile Ser Ile Glu			
65	70	75	80
Asp Asp Gly Thr Ile Phe Ile Gly Ala Asp Asn Gly Asp Ser Ala Glu			
85	90	95	
Ser Ala Arg Ser Met Ile Asn Ala Ile Ala Asn Pro Gln Met Pro Glu			
100	105	110	
Val Gly Glu Arg Tyr Leu Gly Thr Val Val Lys Thr Thr Ser Phe Gly			
115	120	125	
Ala Phe Val Ser Leu Leu Pro Gly Lys Asp Gly Leu Leu His Ile Ser			
130	135	140	
Lys Met Arg Asp Leu Asn Asp Gly Lys Arg			
145	150		

&lt;210&gt; 2025

&lt;211&gt; 872

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2025

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<213> Homo sapiens

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Ala Ile Asp Val Asp Met Ala Phe Phe Glu Pro Lys Met Arg Glu Ile  
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Leu Glu Gln Asn Cys Thr Gly Asp Glu Asp Cys Asn Phe Phe Asp Cys  
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Phe Ser Arg Cys Asp Leu Arg Val Asn Lys Cys Gly Ala Gln Arg Val  
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85 90 95  
Ser Ala Pro Leu Lys Ser Ser Ala Val Ser Phe Gln Leu Gln Leu Gln  
100 105 110  
Leu Gln Glu Ala Val Gln Glu Cys Ala Asp Pro Gly Val Pro Ser Gly  
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 Lys Leu Phe Phe Cys Gln Leu Cys Ile Thr Ser Asp Asp Ile Gly Tyr  
 35 40 45  
 Ser Cys Arg Leu Lys Phe Lys Ile Gln Val Ala Pro Tyr Ser Ile Phe  
 50 55 60  
 Leu His Lys Glu Arg Leu His Val Leu Ile Leu Cys Gly Leu Cys Tyr  
 65 70 75 80  
 Leu Arg Ser Asn Gln Glu Ser Leu Ile Leu Ser Gln Lys Cys Leu Leu  
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 tgatgctagt ttaggttggg tataccagct tggaagtatg cttagattaa gttacagcag  
 7560  
 atacacaaat tagatgcaag taaaaaaaaat cagaatttct gtagtagaaa ctacgaaaaa  
 7620  
 taaaaaggaa agtttttact ttttgggtat ttttttacga ataagaaaaa gtgagcgtta  
 7680  
 atcagttcaa aaggaggtac tgctgtgtaa tgggcttctg acgttccttc tcatgtcact  
 7740  
 tacgtcacta cttcgccatc aaattgaaca agcttttaat tagatcctga aaattcacta  
 7800  
 tgctagtagt ttattggtag tattatattt tgagtagaac tctgattttc cctagaggcc  
 7860  
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 7920  
 attaaatccc atttctaaaa accacacaat tttttctcat gtaagttgag tggaatgtgg  
 7980  
 ttagttaact gaatttgga tggtcatata aataatttgt tgctgctc  
 8028

&lt;210&gt; 2030

&lt;211&gt; 794

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2030

Met	Arg	Val	Arg	Ile	Gly	Leu	Thr	Leu	Leu	Leu	Cys	Ala	Val	Leu	Leu
1				5				10						15	
Ser	Leu	Ala	Ser	Ala	Ser	Ser	Asp	Glu	Glu	Gly	Ser	Gln	Asp	Glu	Ser
			20					25					30		
Leu	Asp	Ser	Lys	Thr	Thr	Leu	Thr	Ser	Asp	Glu	Ser	Val	Lys	Asp	His
		35					40					45			
Thr	Thr	Ala	Gly	Arg	Val	Val	Ala	Gly	Gln	Ile	Phe	Leu	Asp	Ser	Glu
	50					55					60				
Glu	Ser	Glu	Leu	Glu	Ser	Ser	Ile	Gln	Glu	Glu	Glu	Asp	Ser	Leu	Lys
65					70					75				80	
Ser	Gln	Glu	Gly	Glu	Ser	Val	Thr	Glu	Asp	Ile	Ser	Phe	Leu	Glu	Ser

1541

515	520	525
His Ala Ser Gly Thr Gly Val Met Arg Ser Cys	His Thr Ala Val Glu	
530	535	540
Leu Phe Lys Asn Val Cys Glu Arg Gly Arg Trp Ser Glu Arg Leu Met		
545	550	555
Thr Ala Tyr Asn Ser Tyr Lys Asp Gly Asp Tyr Asn Ala Ala Val Ile		
565	570	575
Gln Tyr Leu Leu Leu Ala Glu Gln Gly Tyr Glu Val Ala Gln Ser Asn		
580	585	590
Ala Ala Phe Ile Leu Asp Gln Arg Glu Ala Ser Ile Val Gly Glu Asn		
595	600	605
Glu Thr Tyr Pro Arg Ala Leu Leu His Trp Asn Arg Ala Ala Ser Gln		
610	615	620
Gly Tyr Thr Val Ala Arg Ile Lys Leu Gly Asp Tyr His Phe Tyr Gly		
625	630	635
Phe Gly Thr Asp Val Asp Tyr Glu Thr Ala Phe Ile His Tyr Arg Leu		
645	650	655
Ala Ser Glu Gln Gln His Ser Ala Gln Ala Met Phe Asn Leu Gly Tyr		
660	665	670
Met His Glu Lys Gly Leu Gly Ile Lys Gln Asp Ile His Leu Ala Lys		
675	680	685
Arg Phe Tyr Asp Met Ala Ala Glu Ala Ser Pro Asp Ala Gln Val Pro		
690	695	700
Val Phe Leu Ala Leu Cys Lys Leu Gly Val Val Tyr Phe Leu Gln Tyr		
705	710	715
Ile Arg Glu Thr Asn Ile Arg Asp Met Phe Thr Gln Leu Asp Met Asp		
725	730	735
Gln Leu Leu Gly Pro Glu Trp Asp Leu Tyr Leu Met Thr Ile Ile Ala		
740	745	750
Leu Leu Leu Gly Thr Val Ile Ala Tyr Arg Gln Arg Gln His Gln Asp		
755	760	765
Met Pro Ala Pro Arg Pro Pro Gly Pro Arg Pro Ala Pro Pro Gln Gln		
770	775	780
Glu Gly Pro Pro Glu Gln Gln Pro Pro Gln		
785	790	

&lt;210&gt; 2031

&lt;211&gt; 662

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2031

atcatcgaaa gcagcgcccg ccagcaggat tcgattttctc gccaaactgac ccagcagttc  
60

atcagccaat ggcaggcggc tcaccggcg gatcagatca ccgtgcgtga cgtggcgctg  
120

aaccccgtgc cgcacctgga cagcatctg ctcggcggct ggatgaaacc tgccgaacag  
180

cgcagcgca tcgaacaggc ttcctggac cgctccaatc aattgaccga cgaattgctc  
240

gccgccgacg tgctggtgat ggctgcaccg atgtacaact tcgctatccc cagcaccctc  
300

aaagcctggc tggaccacgt gttgcgtgcc ggtgtgacct tcaagtacac cgccaccggc  
360

ccccagggat tgctgcacgg caagcgcgcg attgtgctga ccgctcgcgg cggcattcat  
420  
accggcgcca gctccgatca ccaggaaccg tacctgcgcc aggtcatggc ctttatcggg  
480  
attcatgacg tcacgttcat tcatgccgaa ggggtgaact tgagcgggtga cttccaggaa  
540  
aaaggcctta accacgccaa ggcgttgctg gcgcaacttg tggcatgaac cgagtcaacg  
600  
gttaatcgtc acataatcgc cgggtgttta tatcgcttca cgcaaaccct tcaagtacgc  
660  
gt  
662

<210> 2032  
<211> 195  
<212> PRT  
<213> Homo sapiens

<400> 2032  
Ile Ile Glu Ser Ser Ala Arg Gln Gln Asp Ser Ile Ser Arg Gln Leu  
1 5 10 15  
Thr Gln Gln Phe Ile Ser Gln Trp Gln Ala Ala His Pro Ala Asp Gln  
20 25 30  
Ile Thr Val Arg Asp Val Ala Leu Asn Pro Val Pro His Leu Asp Thr  
35 40 45  
His Leu Leu Gly Gly Trp Met Lys Pro Ala Glu Gln Arg Ser Ala Ile  
50 55 60  
Glu Gln Ala Ser Leu Asp Arg Ser Asn Gln Leu Thr Asp Glu Leu Leu  
65 70 75 80  
Ala Ala Asp Val Leu Val Met Ala Ala Pro Met Tyr Asn Phe Ala Ile  
85 90 95  
Pro Ser Thr Leu Lys Ala Trp Leu Asp His Val Leu Arg Ala Gly Val  
100 105 110  
Thr Phe Lys Tyr Thr Ala Thr Gly Pro Gln Gly Leu Leu His Gly Lys  
115 120 125  
Arg Ala Ile Val Leu Thr Ala Arg Gly Gly Ile His Thr Gly Ala Ser  
130 135 140  
Ser Asp His Gln Glu Pro Tyr Leu Arg Gln Val Met Ala Phe Ile Gly  
145 150 155 160  
Ile His Asp Val Thr Phe Ile His Ala Glu Gly Val Asn Leu Ser Gly  
165 170 175  
Asp Phe Gln Glu Lys Gly Leu Asn His Ala Lys Ala Leu Leu Ala Gln  
180 185 190  
Leu Val Ala  
195

<210> 2033  
<211> 380  
<212> DNA  
<213> Homo sapiens

<400> 2033  
aaattttaaa acggtcatca tttaacaggc gaagctgtaa aacgcagtct tgaagagggg  
60

atgaaaaaaaa gtgatttggt aaaaggatca cttcctatca aatcaatcaa cgctcatgga  
 120  
 caaaaagtca caatcaatac taaagaacct tatccagaat taaagtctga actcgcaagc  
 180  
 ccatttgctg ctatatacga cacaaaagct aaaaacaaag taactgatca acctgttggt  
 240  
 acgggtcctt atcaaattga cagttataaa cgttcgcaaa aaatcgtatt aaaacaattc  
 300  
 aaagactact ggcaaggtag gccaaaatta aaaagaatta atgtcactta tcatgaagat  
 360  
 ggtaatantc gtgttgatca  
 380

<210> 2034  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2034  
 Met Lys Lys Ser Asp Leu Leu Lys Gly Ser Leu Pro Ile Lys Ser Ile  
 1 5 10 15  
 Asn Ala His Gly Gln Lys Val Thr Ile Asn Thr Lys Glu Pro Tyr Pro  
 20 25 30  
 Glu Leu Lys Ser Glu Leu Ala Ser Pro Phe Ala Ala Ile Tyr Asp Thr  
 35 40 45  
 Lys Ala Lys Asn Lys Val Thr Asp Gln Pro Val Gly Thr Gly Pro Tyr  
 50 55 60  
 Gln Ile Asp Ser Tyr Lys Arg Ser Gln Lys Ile Val Leu Lys Gln Phe  
 65 70 75 80  
 Lys Asp Tyr Trp Gln Gly Thr Pro Lys Leu Lys Arg Ile Asn Val Thr  
 85 90 95  
 Tyr His Glu Asp Gly Asn Xaa Arg Val Asp  
 100 105

<210> 2035  
 <211> 495  
 <212> DNA  
 <213> Homo sapiens

<400> 2035  
 ngaattcctt tactgcttgc aacacaggcc caagctactc gcagccatga tacttcctgt  
 60  
 cttcacttct ttcattgatg tatgtatgta tgtatgtatg tatgtatgta tgtatgtatg  
 120  
 tatgctntaa tgttcccctt tcatctcgca tgtctccact tctgctgcta ttgctgttac  
 180  
 ttgtgtgttg gtgcacctaa tgggtgtcca tattttctctg atgctgtggt catttttctt  
 240  
 gattctttct actgtctggt cttcagtttg cataatccat attgttctct ctactagttc  
 300  
 actggtgctt ttgcctgcc gctctaattt actgttatcc cctttagtga aattttttct  
 360  
 ttttttctct tctcattcca gttattatac agaactattc aacttcaaga tttgtgggggt  
 420



tttgttttgt tttgttttga gaccccatct caaaaaaaaa aaaaaccagc tttctcctca  
 480  
 acttggggga acctt  
 495

<210> 2036  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2036  
 Xaa Ile Pro Leu Leu Leu Ala Thr Gln Ala Gln Ala Thr Arg Ser His  
 1 5 10 15  
 Asp Thr Ser Cys Leu His Phe Phe His Val Cys Met Tyr Val Cys Met  
 20 25 30  
 Tyr Val Cys Met Tyr Val Cys Met Tyr Ala Xaa Met Phe Pro Phe His  
 35 40 45  
 Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly  
 50 55 60  
 Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu  
 65 70 75 80  
 Asp Ser Phe Tyr Cys Leu Val Phe Ser Leu His Asn Pro Tyr Cys Ser  
 85 90 95  
 Leu Tyr

<210> 2037  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 2037  
 acgcgtgaag ggaaggggga gaccccgga gaaatggaga aatgggggag cacacagacg  
 60  
 ggaagagtga gggtggagtg cctttcccg cgtcatcttc cgtccccact ccacgcccag  
 120  
 caaatccaaa caccgcggcc tctggtggcc cgggcttcca tttcccctgg aggggcaagg  
 180  
 gcgtttcctc ttccgcccac ccggggcgct gagcgggcgg aacagcggcg ggggctttgt  
 240  
 ggtcccgggg ggtccgagtg tgtgtcaggg gctggggcgg gggatgggag cgccccctgg  
 300  
 gtatccctca cggtcctggt tcatgag  
 327

<210> 2038  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2038  
 Met Glu Lys Trp Gly Arg Thr Gln Thr Gly Arg Val Arg Leu Glu Cys  
 1 5 10 15  
 Leu Ser Arg Ala His Leu Pro Ser Pro Leu His Ala Gln Gln Ile Gln

```

                20                25                30
Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala
                35                40                45
Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln
                50                55                60
Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
65                70                75                80
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
                85                90                95
His Glu

```

<210> 2039  
 <211> 307  
 <212> DNA  
 <213> Homo sapiens

<400> 2039  
 accggtgatc cactctgcga aagcggccgc gagcgaagcg ttcttggtct tcttcgagat  
 60  
 cgcgatgtat tgcccggaaa acagcggcctt gatgccgtca ttgagaggct ctggggccaac  
 120  
 accggtacgg gcatatgcct gggcggcatt cttttggatg ttgcgaagaa aggacgcatt  
 180  
 cggcgtgccg aaagccaggg atccttcacc gtagaccttg gaccgatgga ggcccccggc  
 240  
 aatcgagtcc ttcgaaattc ccccttgga tacatgtcgg ccatcgtcgt cagccagagt  
 300  
 aacgcgt  
 307

<210> 2040  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2040
Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro
 1                5                10                15
Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser
                20                25                30
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
                35                40                45
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
                50                55                60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro
65                70                75                80
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
                85                90

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<210> 2041  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

<400> 2041  
 nnccggcgat gcagggattc gcccgcgatg cgctcgaacc cggcgcgggg ggcgttcctc  
 60  
 gccagcttcc tgccgttcgc cagacgcacg gccgaggcgg gggtagcgaa ttcgctcgcc  
 120  
 cagctggtcg ccaagctgac cctgcccggc atgcccgcaca tctaccaggg ctgcgagatg  
 180  
 tgggacctca gcctggtcga ccgggacaat cgccgccccg tcgactacga gacacgcgac  
 240  
 gcggccctgg ccggctgggt cgcgaccccc ccggaggaac gcgccgcggc gctgcgcacc  
 300  
 ctgctgacgg attggcgcag cggcgcggtc aagctggccg tgacgcgt  
 348

<210> 2042  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 2042  
 Xaa Arg Arg Cys Arg Asp Ser Pro Ala Met Arg Ser Asn Pro Ala Arg  
 1 5 10 15  
 Gly Ala Phe Leu Ala Ser Phe Leu Pro Phe Ala Arg Arg Ile Ala Glu  
 20 25 30  
 Ala Gly Val Arg Asn Ser Leu Ala Gln Leu Val Ala Lys Leu Thr Leu  
 35 40 45  
 Pro Gly Met Pro Asp Ile Tyr Gln Gly Cys Glu Met Trp Asp Leu Ser  
 50 55 60  
 Leu Val Asp Arg Asp Asn Arg Arg Pro Val Asp Tyr Glu Thr Arg Asp  
 65 70 75 80  
 Ala Ala Leu Ala Gly Trp Val Ala Thr Pro Pro Glu Glu Arg Ala Ala  
 85 90 95  
 Ala Leu Arg Thr Leu Leu Thr Asp Trp Arg Ser Gly Ala Val Lys Leu  
 100 105 110  
 Ala Val Thr Arg  
 115

<210> 2043  
 <211> 712  
 <212> DNA  
 <213> Homo sapiens

<400> 2043  
 gatctgacgg tctcgactaa gcctgaccat tccgaggtca ccgacgccga ccttgccgtc  
 60  
 gaagattcgg tgcgcagagc cctgtctcga atgcgctccc gggatgccgt ccacggcgag  
 120  
 gaacgtgccg ataccgggga tggacccccg cggtggatca ttgatccgat cgacggcact  
 180  
 gcgaattttc tgcgtgggggt cccagtgtgg gccaccctca ttgccctcag cgtcgaggac  
 240  
 cagattgtcg catctgtggt ctctgtcctt gccctcaagc gacgctgggt ggcagcccgt  
 300

ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat  
 360  
 gtgcgcaatc ttgccgacgc attcttgtcc tactcttcgc tgcacggatg ggtcgagagc  
 420  
 ggacgagggc acgggttcgg tgaactcatg cggtcggtgt ggccggacccg agccttcggc  
 480  
 gatttctggt cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa  
 540  
 ctcagcctgc acgacatggc cgccctcgac gctatcgtca ccgaggcggg cggtaagtcc  
 600  
 accggtctcg atggcaaaga cggcccgtgg tctgggaatg ctctggcgtc gaatggtttc  
 660  
 cttcatgacc aggccttagc catggtccag cctcaggagt gagcaccgat cg  
 712

<210> 2044  
 <211> 233  
 <212> PRT  
 <213> Homo sapiens

<400> 2044  
 Asp Leu Thr Val Ser Thr Lys Pro Asp His Ser Glu Val Thr Asp Ala  
 1 5 10 15  
 Asp Leu Ala Val Glu Asp Ser Val Arg Arg Ala Leu Ser Arg Met Arg  
 20 25 30  
 Ser Arg Asp Ala Val His Gly Glu Glu Arg Ala Asp Thr Gly Asp Gly  
 35 40 45  
 Pro Arg Arg Trp Ile Ile Asp Pro Ile Asp Gly Thr Ala Asn Phe Leu  
 50 55 60  
 Arg Gly Val Pro Val Trp Ala Thr Leu Ile Ala Leu Ser Val Glu Asp  
 65 70 75 80  
 Gln Ile Val Ala Ser Val Val Ser Ala Pro Ala Leu Lys Arg Arg Trp  
 85 90 95  
 Trp Ala Ala Arg Gly Ser Gly Ala Trp Ser Gly Lys Ser Leu Ala Ser  
 100 105 110  
 Ala Thr Pro Ile His Val Ser Asn Val Arg Asn Leu Ala Asp Ala Phe  
 115 120 125  
 Leu Ser Tyr Ser Ser Leu His Gly Trp Val Glu Ser Gly Arg Gly His  
 130 135 140  
 Gly Phe Gly Glu Leu Met Arg Ser Val Trp Arg Thr Arg Ala Phe Gly  
 145 150 155 160  
 Asp Phe Trp Ser Tyr Met Met Val Ala Glu Gly Val Val Asp Val Ala  
 165 170 175  
 Cys Glu Pro Glu Leu Ser Leu His Asp Met Ala Ala Leu Asp Ala Ile  
 180 185 190  
 Val Thr Glu Ala Gly Gly Lys Phe Thr Gly Leu Asp Gly Lys Asp Gly  
 195 200 205  
 Pro Trp Ser Gly Asn Ala Leu Ala Ser Asn Gly Phe Leu His Asp Gln  
 210 215 220  
 Ala Leu Ala Met Val Gln Pro Gln Glu  
 225 230

<210> 2045  
 <211> 406

<212> DNA

<213> Homo sapiens

<400> 2045

nnttggacac cggcgactat gccgccaccg cacggatcaa tcgcggaccc agggcagggg  
60  
atgcgccgga tgggcgacgg tgatggaccg ggcgctggac ctgggcggtc gcttcgacga  
120  
cantacaggc tttggccgag gcgggttgga agaaaccggt caaccggtgg tttggccccg  
180  
catcaatgcc cagaaccaga agccttgccg attcgtccca ggccgttcaa ggccgatggc  
240  
gagatcgtcg cgatgactgg cgacggtgtc aacgacgccc cctcgttcaa ggccggcccat  
300  
atcgggtgtcg ccatggacaa acgcggcacc gacgtcgcgc gcgaggcttc cgccatggtc  
360  
ctgctcgagg atgattttgg atcgatcgtg cagtcgggtcc ggctcg  
406

<210> 2046

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2046

Xaa	Trp	Thr	Pro	Ala	Thr	Met	Pro	Pro	Pro	His	Gly	Ser	Ile	Ala	Asp	
1				5					10						15	
Pro	Gly	Gln	Gly	Met	Arg	Arg	Met	Gly	Asp	Gly	Asp	Gly	Pro	Gly	Ala	
			20					25					30			
Gly	Pro	Gly	Arg	Ser	Leu	Arg	Arg	Xaa	Tyr	Arg	Leu	Trp	Pro	Arg	Arg	
		35					40					45				
Val	Gly	Arg	Asn	Arg	Ser	Thr	Gly	Gly	Leu	Ala	Pro	His	Gln	Cys	Pro	
	50					55					60					
Glu	Pro	Glu	Ala	Leu	Arg	Ile	Arg	Pro	Arg	Pro	Phe	Lys	Ala	Asp	Gly	
65					70				75					80		
Glu	Ile	Val	Ala	Met	Thr	Gly	Asp	Gly	Val	Asn	Asp	Ala	Pro	Ser	Leu	
			85					90						95		
Lys	Ala	Ala	His	Ile	Gly	Val	Ala	Met	Asp	Lys	Arg	Gly	Thr	Asp	Val	
			100					105					110			
Ala	Arg	Glu	Ala	Ser	Ala	Met	Val	Leu	Leu	Glu	Asp	Asp	Phe	Gly	Ser	
		115					120					125				
Ile	Val	Gln	Ser	Val	Arg	Leu										
	130					135										

<210> 2047

<211> 796

<212> DNA

<213> Homo sapiens

<400> 2047

aagcttttga acgagacccc tgagctctgg gttcagcccc gaggaagccc agcaacagga  
60  
tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcagggg  
120

tgctggccgg ccaggagaga gaggatccgg gggcttggtc agtcctagca ctgcccacgt  
 180  
 gccggatggg gcactcgggc agagagacca gagcagctgg caaaacagtg atgctagcca  
 240  
 ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgtga  
 300  
 cctggaagat ggggagatgg gaaagcgagg ctgggtcggg gagtttagcc tcagtgttgg  
 360  
 cccccagcga gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcat  
 420  
 cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtgggtg  
 480  
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 540  
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 600  
 tgtgggttct gggggctcga gcgaggccag ggagagtgcc gtgggacaga tgggctggtc  
 660  
 aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaaagtg gagggctctga  
 720  
 agagccgggg ggaatcggaa ttggggagaa ggactggact tctgatgtta atgtgaagag  
 780  
 caaagatttg gctgag  
 796

&lt;210&gt; 2048

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2048

Met	Gly	Lys	Arg	Gly	Trp	Val	Gly	Glu	Phe	Ser	Leu	Ser	Val	Gly	Pro
1				5					10					15	
Gln	Arg	Glu	Ala	Ala	Phe	Ser	Pro	Gly	Gln	Gln	Asp	Trp	Ser	Arg	Asp
			20					25					30		
Phe	Cys	Ile	Glu	Ala	Ser	Glu	Arg	Ser	Tyr	Gln	Phe	Gly	Ile	Ile	Gly
		35					40					45			
Asn	Asp	Arg	Val	Ser	Gly	Ala	Gly	Phe	Ser	Pro	Ser	Ser	Lys	Met	Glu
	50					55					60				
Gly	Gly	His	Phe	Val	Pro	Pro	Gly	Lys	Thr	Thr	Ala	Gly	Ser	Val	Asp
65					70					75				80	
Trp	Thr	Asp	Gln	Leu	Gly	Leu	Arg	Asn	Leu	Glu	Val	Ser	Ser	Cys	Val
			85					90						95	
Gly	Ser	Gly	Gly	Ser	Ser	Glu	Ala	Arg	Glu	Ser	Ala	Val	Gly	Gln	Met
			100					105					110		
Gly	Trp	Ser	Gly	Gly	Leu	Ser	Leu	Arg	Asp	Met	Asn	Leu	Thr	Gly	Cys
		115					120					125			
Leu	Glu	Ser	Gly	Gly	Ser	Glu	Glu	Pro	Gly	Gly	Ile	Gly	Ile	Gly	Glu
		130				135					140				
Lys	Asp	Trp	Thr	Ser	Asp	Val	Asn	Val	Lys	Ser	Lys	Asp	Leu	Ala	Glu
145					150					155					160

&lt;210&gt; 2049

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2049

cgcgtcgctt acggtgcgct gaataccagc ctgctggcgc tggcggtcag cttcgcgctc  
 60  
 ctgttcctcg ggatagtgtt cgggctgatg ccacgtctga tgtgcggggg gattgaactg  
 120  
 gccaacgctc ccccgccaat cgccctgggc ctgttagtag tcgccattag cggcccttca  
 180  
 gcctacgggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgcccattgt  
 240  
 gcttcgttgt tggcggaagc ccgcacgcag ccctatatcc gcatgttgcc ggtattgggc  
 300  
 gtcggccgat ggcgcacgct gacccactac ctgctgccgg cgctctctgc tcccctgctg  
 360  
 cgccacgcca tgttgcgtct gccgggcatt gcgctggcgc tggcggcctt gggttttttt  
 420  
 ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcattgct  
 480  
 tatctcgaac gggcgccctg gggagtcctg gcaccg  
 516

&lt;210&gt; 2050

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2050

Arg	Val	Ala	Tyr	Gly	Ala	Leu	Asn	Thr	Ser	Leu	Leu	Ala	Leu	Ala	Val
1				5					10					15	
Ser	Phe	Ala	Ser	Leu	Phe	Leu	Gly	Ile	Val	Phe	Gly	Leu	Met	Pro	Arg
			20					25					30		
Leu	Met	Cys	Gly	Val	Ile	Glu	Leu	Ala	Asn	Ala	Pro	Pro	Pro	Ile	Ala
		35					40					45			
Leu	Gly	Leu	Leu	Val	Val	Ala	Ile	Ser	Gly	Pro	Ser	Ala	Tyr	Gly	Ala
	50					55					60				
Ala	Cys	Ala	Val	Met	Leu	Val	Ser	Trp	Ala	Pro	Leu	Ala	Ala	His	Cys
65					70				75					80	
Ala	Ser	Leu	Leu	Ala	Glu	Ala	Arg	Thr	Gln	Pro	Tyr	Ile	Arg	Met	Leu
			85					90					95		
Pro	Val	Leu	Gly	Val	Gly	Arg	Trp	Arg	Thr	Leu	Thr	His	Tyr	Leu	Leu
			100					105					110		
Pro	Ala	Leu	Ser	Ala	Pro	Leu	Leu	Arg	His	Ala	Met	Leu	Arg	Leu	Pro
		115				120					125				
Gly	Ile	Ala	Leu	Ala	Leu	Ala	Ala	Leu	Gly	Phe	Phe	Gly	Leu	Gly	Pro
	130				135						140				
Gln	Pro	Pro	Ser	Ala	Glu	Trp	Gly	Leu	Val	Leu	Ala	Glu	Gly	Met	Pro
145					150					155				160	
Tyr	Leu	Glu	Arg	Ala	Pro	Trp	Gly	Val	Leu	Ala	Pro				
				165						170					

&lt;210&gt; 2051

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2051

gagcaaaact atcggttctac cggcaatatt ctgaaaagtg ccaaccaact tatttcgaat  
60  
aatagtgatc gtctcggtaa gaatttatgg accgacggtg aaatggggga gccagtaggt  
120  
atztatgcag catttaatga attagatgag gcaaaatttg tggcgtctca aatccaaaat  
180  
tgggtagatg atggtgggga attagatgat tgtgctgttt tatatcgtag taatagccaa  
240  
tctcgtgtta ttgaagaagc cttgattcgt tgccaaattc cttatcgaat ttatggcggg  
300  
atgcgattct tcgaacgcca agaaattaaa gatgcgttgg catatttacg ttttaattaat  
360  
aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgcctacgcg t  
411

&lt;210&gt; 2052

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2052

Glu	Gln	Asn	Tyr	Arg	Ser	Thr	Gly	Asn	Ile	Leu	Lys	Ser	Ala	Asn	Gln
1				5					10					15	
Leu	Ile	Ser	Asn	Asn	Ser	Asp	Arg	Leu	Gly	Lys	Asn	Leu	Trp	Thr	Asp
			20					25					30		
Gly	Glu	Met	Gly	Glu	Pro	Val	Gly	Ile	Tyr	Ala	Ala	Phe	Asn	Glu	Leu
		35					40					45			
Asp	Glu	Ala	Lys	Phe	Val	Ala	Ser	Gln	Ile	Gln	Asn	Trp	Val	Asp	Asp
	50					55					60				
Gly	Gly	Glu	Leu	Asp	Asp	Cys	Ala	Val	Leu	Tyr	Arg	Ser	Asn	Ser	Gln
65				70						75				80	
Ser	Arg	Val	Ile	Glu	Glu	Ala	Leu	Ile	Arg	Cys	Gln	Ile	Pro	Tyr	Arg
			85					90					95		
Ile	Tyr	Gly	Gly	Met	Arg	Phe	Phe	Glu	Arg	Gln	Glu	Ile	Lys	Asp	Ala
		100						105					110		
Leu	Ala	Tyr	Leu	Arg	Leu	Ile	Asn	Asn	Arg	Gln	Asp	Asp	Ala	Ala	Phe
		115					120					125			
Glu	Arg	Val	Ile	Asn	Thr	Pro	Thr	Arg							
	130						135								

&lt;210&gt; 2053

&lt;211&gt; 287

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2053

nccatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgccaaatc  
60  
ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaagac  
120



ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc  
 180  
 acacctgagg gtgccgaggg cccgactccg caaaccagc accagctgaa ggcctgtgc  
 240  
 tccctggctg cagagggat gtggacagac acatttgagt tttgtga  
 287

<210> 2054  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

<400> 2054  
 Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys  
 1 5 10 15  
 Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr  
 20 25 30  
 Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly  
 35 40 45  
 Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys  
 50 55 60  
 Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys  
 65 70 75

<210> 2055  
 <211> 298  
 <212> DNA  
 <213> Homo sapiens

<400> 2055  
 nnacgcgttg ttatgaacaa tgacgggtgc ctctaccccg atacctgcgt ggggtactgat  
 60  
 tcccacacca ccatggaaaa tgggtcttggc attctgggct ggggcgtcgg tgggtattgaa  
 120  
 gccgaggctg ctatgcttgg ccagcccatc tccatgctta tccccgtgt tgttggttt  
 180  
 aaacttactg gccaaacaca gccgggtgtc accgctacag atgttgttct taccattact  
 240  
 gatatgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg  
 298

<210> 2056  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 2056  
 Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys  
 1 5 10 15  
 Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu  
 20 25 30  
 Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Ala Met Leu Gly Gln  
 35 40 45  
 Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly

50		55		60	
Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr					
65		70		75	80
Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr					
	85		90		95
Gly Gly Ser					

<210> 2057  
 <211> 569  
 <212> DNA  
 <213> Homo sapiens

<400> 2057  
 acgcgtcccg acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta  
 60  
 gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa  
 120  
 caaaatctag ttggaccaaa caacgcccag tatggtcggt atctagcctt tggatgatc  
 180  
 ttcattggtct tcaataacca gaaaaagggg ctggatacag ttacagacta tcaccgtggt  
 240  
 ttggatatca cagaagccac tactacaact tcttacaccc aagatggaac gacctttaaa  
 300  
 agagaaacct tctcaagtta ccctgatgat gttactgtta ctacttgac caaaaaaggg  
 360  
 gacaaaaaac ttgattttac agtttggaat agcttaacag aagatttact tgctaacgga  
 420  
 gactactcag cggaatattc taactacaag agtggccatg ttacgacaga cccaaatggt  
 480  
 atcctactaa aaggtacagt caaagataat ggcctccagt tcgcatccta tctaggaatt  
 540  
 aaaacggacg gaaaagttac tgttcatga  
 569

<210> 2058  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 2058	
Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr	
1	15
His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Thr Ser Tyr Thr	
	30
Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp	
35	45
Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp	
50	60
Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp	
65	80
Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp	
	95
Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln	

	100		105		110										
Phe	Ala	Ser	Tyr	Leu	Gly	Ile	Lys	Thr	Asp	Gly	Lys	Val	Thr	Val	His
	115		120		125										

<210> 2059  
 <211> 644  
 <212> DNA  
 <213> Homo sapiens

<400> 2059  
 gaattcgtgc caccgtgcc atacttcgcc acgcaacaga gtgccgtcag cggattgggc  
 60  
 agcaatcgac ctgtaggact cagccatgat cgactgggca tcctcgtata gtcgcgatgc  
 120  
 cgcaaccgcc tgcgcttcca agcctgcagc gacgtaagag gccctctcac aactgaacc  
 180  
 gatcgctcca gacaacgtgg aagcgataac ctcgcgtcgc ttctgctgat tctgggcca  
 240  
 gctcgacaag aagaaccgca gaggggagc ggcctgggtca gggagcgcac cttcagcgtt  
 300  
 cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgtcatgag  
 360  
 tcggccgagg tccgccggtta cctctctcat ggcttcacaa ggaacgcggt cacacaccac  
 420  
 cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc  
 480  
 gtagcgggct gctgaggtga caaagatcca cagatccgcy gcctggagca actgagccgc  
 540  
 cagatcacga ttgcgggtca ccacagagtc gatgtccggg gcacgagga tggccaaacc  
 600  
 tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt  
 644

<210> 2060  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 2060  
 Met Arg Glu Val Pro Ala Asp Leu Gly Arg Leu Met Thr Glu Arg Gly  
 1 5 10 15  
 Leu Ala Asp Ser Pro Leu Phe Ala Val Pro Glu Thr Lys Thr Asn Ala  
 20 25 30  
 Glu Gly Ala Leu Pro Asp Gln Ala Val Ala Pro Leu Arg Phe Phe Leu  
 35 40 45  
 Ser Ser Leu Ala Gln Asn Gln Lys Arg Arg Glu Val Ile Ala Ser  
 50 55 60  
 Thr Leu Ser Gly Ala Ile Gly Ser Val Cys Glu Arg Ala Ser Tyr Val  
 65 70 75 80  
 Ala Ala Gly Leu Glu Ala Gln Ala Val Ala Ala Ser Arg Leu Tyr Glu  
 85 90 95  
 Asp Ala Gln Ser Ile Met Ala Glu Ser Tyr Arg Ser Ile Ala Ala Gln  
 100 105 110  
 Ser Ala Asp Gly Thr Leu Leu Arg Gly Glu Val Leu Ala Arg Trp His

115  
Glu Phe  
130

120

125

<210> 2061  
<211> 481  
<212> DNA  
<213> Homo sapiens

<400> 2061  
gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgccatggt gtggccccag  
60  
atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag  
120  
acgccgccac ctggatgcac tgaggtgtgc acagccacgt ggagatgatg ctggggggctc  
180  
acggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggc  
240  
tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt  
300  
tgccacacgc accaggtcct gactgggagt ccggccccca gggcctgtgg atggctggcc  
360  
tggggcccagc ctccgcccc aaggggtgctg gcacctggca tgtgcccgaac agttggggcc  
420  
ggctgggtggg aaggtgtgtg tcaggtggcg gagcctcggt gccaggatct cactcacgcg  
480  
t  
481

<210> 2062  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 2062  
Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Gly Trp Ala Gln Ala Ser  
1 5 10 15  
His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val  
20 25 30  
Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro  
35 40 45  
Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg  
50 55 60  
Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu  
65 70 75 80  
His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe Phe  
85 90 95  
Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His  
100 105 110  
Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala  
115 120 125  
Leu Leu Thr Arg Leu  
130

<210> 2063  
<211> 419  
<212> DNA  
<213> Homo sapiens

<400> 2063  
gccggcgccg tcgagcgcggt gcctttcaat atcgaggccc aagacatggt gctgctcatc  
60  
gcggacacca atgccccgca catgctttcc gacggccaat acgcctcccg ccggggcatc  
120  
atcgagcccg tccaatctgc cgccggttgc tccatccgcg agatctcgaa tgcggtggac  
180  
tttgccgcca ccgtcaatcc cgccgaggcg gaactctatc gccgccgcg gcaccacgtg  
240  
gtggaagaaa ccaaccggac cctagatgcc gctaccgcg tggcatcttc cgatctagat  
300  
acattccggc ggcttatgcg cgagagccac atctccctgc gcgaccttta tgaggtcacc  
360  
actccggagc tcgactccgt ttttaccgcg gccggcgagc tgggcgctcg catgannnn  
419

<210> 2064  
<211> 139  
<212> PRT  
<213> Homo sapiens

<400> 2064  
Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met  
1 5 10 15  
Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly  
20 25 30  
Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala  
35 40 45  
Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr  
50 55 60  
Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Arg Val His His Val  
65 70 75 80  
Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser  
85 90 95  
Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser  
100 105 110  
Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe  
115 120 125  
Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa  
130 135

<210> 2065  
<211> 598  
<212> DNA  
<213> Homo sapiens

<400> 2065  
gccggcgcta tggcctctct gctcgccgac gccgccgatg cccttcccg cgcaaagggtg  
60

cgcgcgaccg ttactggatc ggcgggattg ggaaccgcag aggcattggg ccttactttc  
 120  
 attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccga cgccgacgtg  
 180  
 cttctcgaac tcggtggtga ggatgccaaag atcacctacc ttaagccggt ccccgaaacag  
 240  
 cgcacgaatg gttcgtgtgc tgggtggcacc ggtgccttca tcgaccagat ggctaccctg  
 300  
 ctgcacaccg acactcccgg cctcaatgac ctgcacatccc gagccaagac catccatccg  
 360  
 atcgccctgc gctgtggtgt ttttgccaag tccgaccttc agcccctcat taacgagggg  
 420  
 gcccgccacg aggatctggc tgcctcggtc ctgcaggctg tcgccactca gtgcattgcc  
 480  
 ggccctggcat gtggtcgccc gattcgaggt aaggtcatct tccttggcgg tccgcttcac  
 540  
 tttatgccaa gtttgcgaga cgctttctcg cgcgtcctcg acggttaagg tgacgcgt  
 598

<210> 2066  
 <211> 199  
 <212> PRT  
 <213> Homo sapiens

<400> 2066  
 Ala Gly Ala Met Ala Ser Leu Leu Ala Asp Ala Ala Asp Ala Leu Pro  
 1 5 10 15  
 Gly Ala Lys Val Arg Ala Thr Val Thr Gly Ser Ala Gly Leu Gly Thr  
 20 25 30  
 Ala Glu Ala Leu Gly Leu Thr Phe Ile Gln Glu Val Ile Ala Glu Thr  
 35 40 45  
 Ala Ala Val Gln Arg Trp Asn Pro Asp Ala Asp Val Leu Leu Glu Leu  
 50 55 60  
 Gly Gly Glu Asp Ala Lys Ile Thr Tyr Leu Lys Pro Val Pro Glu Gln  
 65 70 75 80  
 Arg Met Asn Gly Ser Cys Ala Gly Gly Thr Gly Ala Phe Ile Asp Gln  
 85 90 95  
 Met Ala Thr Leu Leu His Thr Asp Thr Pro Gly Leu Asn Asp Leu Ala  
 100 105 110  
 Ser Arg Ala Lys Thr Ile His Pro Ile Ala Ser Arg Cys Gly Val Phe  
 115 120 125  
 Ala Lys Ser Asp Leu Gln Pro Leu Ile Asn Glu Gly Ala Arg His Glu  
 130 135 140  
 Asp Leu Ala Ala Ser Val Leu Gln Ala Val Ala Thr Gln Cys Ile Ala  
 145 150 155 160  
 Gly Leu Ala Cys Gly Arg Pro Ile Arg Gly Lys Val Ile Phe Leu Gly  
 165 170 175  
 Gly Pro Leu His Phe Met Pro Ser Leu Arg Asp Ala Phe Ser Arg Val  
 180 185 190  
 Leu Asp Gly Lys Val Asp Ala  
 195

<210> 2067  
 <211> 366

<212> DNA  
<213> Homo sapiens

<400> 2067  
ttccagcaga tgctgcaaac ctggacccgc agcggcacgc tgcaggagggc cgtggccaac  
60  
aagatcgccg aatggctgga tgccgacctg caacagtggg acatttcccg cgatgcaccg  
120  
tacttcgggt tcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg  
180  
ccgatcggct acatggccag tttcaagaac ctgtgcgacc gcacgccgga gctggacttc  
240  
gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcacgga caaggacatc  
300  
gtcaacttcc acgccctgtt ctggccggcg atgctcgaag gctcgggcta ccgtaaaccg  
360  
accggt  
366

<210> 2068  
<211> 122  
<212> PRT  
<213> Homo sapiens

<400> 2068  
Phe Gln Gln Met Leu Gln Thr Trp Thr Arg Ser Gly Thr Leu Gln Glu  
1 5 10 15  
Ala Val Ala Asn Lys Ile Ala Glu Trp Leu Asp Ala Asp Leu Gln Gln  
20 25 30  
Trp Asp Ile Ser Arg Asp Ala Pro Tyr Phe Gly Phe Glu Ile Pro Gly  
35 40 45  
Glu Pro Gly Lys Tyr Phe Tyr Val Trp Leu Asp Ala Pro Ile Gly Tyr  
50 55 60  
Met Ala Ser Phe Lys Asn Leu Cys Asp Arg Thr Pro Glu Leu Asp Phe  
65 70 75 80  
Asp Ala Phe Trp Ala Lys Asp Ser Thr Ala Glu Leu Tyr His Phe Ile  
85 90 95  
Gly Lys Asp Ile Val Asn Phe His Ala Leu Phe Trp Pro Ala Met Leu  
100 105 110  
Glu Gly Ser Gly Tyr Arg Lys Pro Thr Gly  
115 120

<210> 2069  
<211> 280  
<212> DNA  
<213> Homo sapiens

<400> 2069  
cctagagagg atggtggaga ctgtgcgtgt gcagggtggt ccggaacctt ccctgggatg  
60  
catggggcct cgccgcaggc catctctcca gacctgggct caccctgccc ctgtgctgtt  
120  
gcctttggct ggaattccac cccagccttc ttgcctcaag aacgcccttc ccccttcaga  
180

tctcatgggc acaggccccg tcttcctaaa cggggtcaga gccccagta atcatgacaa  
 240  
 agaccctctc ctcgatcaag ctttgggtcaa gctcctaccc  
 280

<210> 2070  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 2070  
 Met Val Glu Thr Val Arg Val Gln Gly Val Pro Glu Pro Ser Leu Gly  
 1 5 10 15  
 Cys Met Gly Pro Arg Arg Arg Pro Ser Leu Gln Thr Trp Ala His Pro  
 20 25 30  
 Ala Pro Val Leu Leu Pro Leu Ala Gly Ile Pro Pro Gln Pro Ser Cys  
 35 40 45  
 Leu Lys Asn Ala Leu Pro Pro Ser Asp Leu Met Gly Thr Gly Pro Val  
 50 55 60  
 Phe Leu Asn Gly Val Arg Ala Pro Ser Asn His Asp Lys Asp Pro Leu  
 65 70 75 80  
 Leu Asp Gln Ala Leu Val Lys Leu Leu Pro  
 85 90

<210> 2071  
 <211> 399  
 <212> DNA  
 <213> Homo sapiens

<400> 2071  
 acgcgtgtcc agcagactta gaaagcaggt tcctcttgtc atacagcacg ttaacatagc  
 60  
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc tttcaccttt gacttcagat  
 120  
 gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac  
 180  
 agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag  
 240  
 gggaggttgt caggggatga gctgctcctg aggaagaggc agagatcaag cttcactcag  
 300  
 cagctggatt ctcacctagt ttatagactg aaatcctgca aggtgggttac aacagtgaac  
 360  
 aatatgttca tacataaaga ctctaccctc aggtgatca  
 399

<210> 2072  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2072  
 Met Thr Leu Ser Pro Leu Thr Ser Asp Ala Gly Ala Phe Tyr Phe Leu  
 1 5 10 15  
 Cys Gln Thr Leu His Met Lys His Phe Trp Asn Asn Tyr Arg His Asp



			20					25				30							
Phe	Leu	Tyr	Leu	Gly	Lys	Arg	Arg	Ala	Leu	Asn	Gln	Ile	Arg	Gly	Trp				
		35					40					45							
Glu	Gly	Arg	Leu	Ser	Gly	Asp	Glu	Leu	Leu	Leu	Arg	Lys	Arg	Gln	Arg				
	50					55					60								
Ser	Ser	Phe	Thr	Gln	Gln	Leu	Asp	Ser	His	Leu	Val	Tyr	Arg	Leu	Lys				
65					70					75					80				
Ser	Cys	Lys	Val	Val	Thr	Thr	Val	Asn	Asn	Met	Phe	Ile	His	Lys	Asp				
			85					90						95					
Ser	Thr	Leu	Arg																
			100																

<210> 2073  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

<400> 2073  
 ggatccactt ctgtgccttt ccagcttcta gaggtgcct gcgttccttg gctcgtggcc  
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 ccttcctcca ccttcaagcc agcagcggag gcctgagtcc ttctcatgcc atctctctgt  
 120  
 tctctctcct gcctcctcct ccacactgaa ggacccttgt gatcacactg gccccccac  
 180  
 cggatgaccc aggataatcc atctccctgt ttgaaggctg gctgattagc aaccttcatt  
 240  
 ccattctgct ccttcattcc ccttggccat gtaatgggat tcacagcttc tggggattag  
 300  
 gacatggaca tcttgtggcg ggggcataat tctgtcgac  
 339

<210> 2074  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

Met	Lys	Glu	Ala	Asp	Gly	Met	Lys	Val	Ala	Asn	Gln	Pro	Thr	Phe	Lys				
1				5				10				15							
Gln	Gly	Asp	Gly	Leu	Ser	Trp	Val	Ile	Arg	Trp	Gly	Gly	Gln	Cys	Asp				
		20					25					30							
His	Arg	Gly	Pro	Ser	Val	Trp	Arg	Arg	Arg	Gln	Glu	Arg	Glu	Gln	Arg				
	35					40				45									
Asp	Gly	Met	Arg	Arg	Thr	Gln	Ala	Ser	Ala	Ala	Gly	Leu	Lys	Val	Glu				
	50				55					60									
Glu	Gly	Ala	Thr	Ser	Gln	Gly	Thr	Gln	Ala	Ala	Ser	Arg	Ser	Trp	Lys				
65				70				75						80					
Gly	Thr	Glu	Val	Asp															
			85																

<210> 2075  
 <211> 481  
 <212> DNA  
 <213> Homo sapiens

<400> 2075  
ntggccaggt tgacctcaaa ggtgtacatt gttttatgtg gcgacaatgg actgtcagaa  
60  
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300  
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481

<210> 2076  
<211> 160  
<212> PRT  
<213> Homo sapiens

<400> 2076  
Xaa Ala Arg Leu Thr Ser Lys Val Tyr Ile Val Leu Cys Gly Asp Asn  
1 5 10 15  
Gly Leu Ser Glu Thr Lys Glu Leu Ser Cys Pro Glu Lys Ser Leu Phe  
20 25 30  
Glu Arg Asn Ser Arg His Thr Phe Ile Leu Ser Ala Pro Ala Gln Leu  
35 40 45  
Gly Leu Leu Arg Lys Ile Arg Leu Trp His Asp Ser Arg Gly Pro Ser  
50 55 60  
Pro Gly Trp Phe Ile Ser His Val Met Val Lys Glu Leu His Thr Gly  
65 70 75 80  
Gln Gly Trp Phe Phe Pro Ala Gln Cys Trp Leu Ser Ala Gly Arg His  
85 90 95  
Asp Gly Arg Val Glu Arg Glu Leu Thr Cys Leu Gln Gly Gly Leu Gly  
100 105 110  
Phe Trp Lys Leu Phe Tyr Cys Lys Phe Thr Glu Tyr Leu Glu Asp Phe  
115 120 125  
His Val Trp Leu Ser Val Tyr Ser Arg Pro Ser Ser Ser Arg Tyr Leu  
130 135 140  
His Thr Pro Arg Pro Thr Val Ser Phe Ser Leu Leu Cys Val Tyr Ala  
145 150 155 160

<210> 2077  
<211> 1410  
<212> DNA  
<213> Homo sapiens

<400> 2077

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120  
tttttttttt tttttttttt ttttgctttc taaagtggct ttaatatac acaagcggct  
180  
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240  
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300  
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360  
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420  
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720  
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780  
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900  
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1260  
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1320  
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1380  
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1410

&lt;210&gt; 2078

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser  
 1 5 10 15  
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser  
 20 25 30  
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser  
 35 40 45  
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys  
 50 55 60  
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln  
 65 70 75 80  
 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly  
 85 90 95  
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala  
 100 105

&lt;210&gt; 2079

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2079

atttacctcg caaccgaccc tgatecgtgaa ggtgaaagca tcagctggca catccagcag  
 60  
 gtactggcgg tcaaatecta caaacgcatt accttcaacg agatcactct caagcgcgtt  
 120  
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gagttgcctc acaggaatgc  
 180  
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 240  
 ggcaaacta cttccgctgg ccgcgttcaa tcaccgcgcg tgtttcttgt ggtctttgcg  
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 360  
 gatgtaagtc ggggcaccac ttggtatgcc gagtggcaac cggtagcgga tttcgcaagc  
 420  
 aagcacttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat  
 480  
 gtggtcgtgg agtcctgcga ggatcgcaag gccgagcgtc atcctcctgc accattcatc  
 540  
 tcatccactc ttcaacaggc cgcca  
 565

&lt;210&gt; 2080

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp  
 1 5 10 15  
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe  
 20 25 30  
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg

35 40 45  
 Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu  
 50 55 60  
 Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met  
 65 70 75 80  
 Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu  
 85 90 95  
 Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His  
 100 105 110  
 Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp  
 115 120 125  
 Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro  
 130 135 140  
 Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn  
 145 150 155 160  
 Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro  
 165 170 175  
 Ala Pro Phe Ile Ser Ser Thr Leu Gln Gln Ala Ala  
 180 185

&lt;210&gt; 2081

&lt;211&gt; 319

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2081

aagcttatgg aaaaacgggg atacggagag gagtatataa atcgctataa aatgatgaca  
 60  
 aggttccatc atcaacgggt tccactagta attttggtgt gtggaactgc ctgtactgga  
 120  
 aaatcaacaa tcgctacaca acttgctcag aggctcaatt tgcctaattgt tttgcagacg  
 180  
 gacatggtgt atgagctgct gcggacatca acagatgcgc cacttacttc agttcctgtg  
 240  
 tgggctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga  
 300  
 gttgtacgca agggtttgg  
 319

&lt;210&gt; 2082

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2082

Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr  
 1 5 10 15  
 Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu  
 20 25 30  
 Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu  
 35 40 45  
 Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr  
 50 55 60  
 Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

65		70		75		80									
Trp	Ala	Arg	Asp	Phe	Asn	Ser	Pro	Glu	Glu	Leu	Ile	Thr	Glu	Phe	Cys
			85					90					95		
Arg	Glu	Cys	Arg	Val	Val	Arg	Lys	Gly	Leu						
			100					105							

<210> 2083  
 <211> 382  
 <212> DNA  
 <213> Homo sapiens

<400> 2083  
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 120  
 caccagccgg tcatttgtgc tgttgccgc ttgtggctga aaaaatgtgc ggatgacagt  
 180  
 gagacgtcca actggatcgg cgctaatacc aaggaatgcc ccaaagtctg ttcgacgatt  
 240  
 gaaaagaatg gcggatgtaa tcatatgacg tgctcgcaagt gcaaatacga attttgttgg  
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 atttgctcgg gcccatggtc ggagcacgga aacaactatt acaactgcaa tcggtacgat  
 360  
 gaaaaggcag gagatgaagg tn  
 382

<210> 2084  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

Xaa	Pro	Asp	Cys	Asp	Met	Ala	Val	Glu	Cys	Ala	Val	Thr	Arg	Lys	Gln
1			5					10						15	
Leu	Tyr	Thr	Ile	Ile	Pro	Thr	Val	Glu	Cys	Asn	Cys	Gly	His	Val	Phe
			20					25					30		
Cys	Phe	Gly	Cys	Gly	Leu	Asp	Gly	His	Gln	Pro	Val	Ile	Cys	Ala	Val
		35				40						45			
Val	Arg	Leu	Trp	Leu	Lys	Lys	Cys	Ala	Asp	Asp	Ser	Glu	Thr	Ser	Asn
	50				55					60					
Trp	Ile	Gly	Ala	Asn	Thr	Lys	Glu	Cys	Pro	Lys	Cys	Cys	Ser	Thr	Ile
65				70				75					80		
Glu	Lys	Asn	Gly	Gly	Cys	Asn	His	Met	Thr	Cys	Arg	Lys	Cys	Lys	Tyr
			85					90					95		
Glu	Phe	Cys	Trp	Ile	Cys	Ser	Gly	Pro	Trp	Ser	Glu	His	Gly	Asn	Asn
			100				105					110			
Tyr	Tyr	Asn	Cys	Asn	Arg	Tyr	Asp	Glu	Lys	Ala	Gly	Asp	Glu	Gly	
			115				120					125			

<210> 2085  
 <211> 478  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2085

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 120  
 atccggcgtc gcgtggagga agccgccgaa ctctcgacc tcaccgacta tctggaccgc  
 180  
 aaaccaagg cactctccgg tggccagcgg cagcgcgctg ccatggggcg cgctattgtt  
 240  
 cgttcccccc gcgtcttctt gatggacgag cctctttcta acctggatgc gcgtctgcgt  
 300  
 gtccgcaccc gcgcccagat tgcggaactg cagcgccgcc tgggcaccac caccgtttat  
 360  
 gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tctctgtgcc  
 420  
 gggaaactgc agcaggtgga tactccacgt aatcttttcg accacccgc taacgcgt  
 478

&lt;210&gt; 2086

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2086

Xaa	Asp	Pro	Lys	Asp	Arg	Asp	Ile	Ala	Met	Val	Phe	Gln	Asn	Tyr	Ala	
1			5						10						15	
Leu	Tyr	Pro	His	Met	Thr	Val	Ala	Asp	Asn	Met	Gly	Phe	Ala	Leu	Lys	
			20					25					30			
Leu	Ala	Lys	Val	Asp	Lys	Lys	Glu	Ile	Arg	Arg	Arg	Val	Glu	Glu	Ala	
		35					40					45				
Ala	Glu	Leu	Leu	Asp	Leu	Thr	Asp	Tyr	Leu	Asp	Arg	Lys	Pro	Lys	Ala	
	50					55					60					
Leu	Ser	Gly	Gly	Gln	Arg	Gln	Arg	Val	Ala	Met	Gly	Arg	Ala	Ile	Val	
65				70						75				80		
Arg	Ser	Pro	Arg	Val	Phe	Leu	Met	Asp	Glu	Pro	Leu	Ser	Asn	Leu	Asp	
			85					90					95			
Ala	Arg	Leu	Arg	Val	Arg	Thr	Arg	Ala	Gln	Ile	Ala	Glu	Leu	Gln	Arg	
		100						105					110			
Arg	Leu	Gly	Thr	Thr	Thr	Val	Tyr	Val	Thr	His	Asp	Gln	Val	Glu	Ala	
		115					120				125					
Met	Thr	Met	Gly	Asp	Arg	Val	Ala	Val	Leu	Cys	Ala	Gly	Lys	Leu	Gln	
	130					135					140					
Gln	Val	Asp	Thr	Pro	Arg	Asn	Leu	Phe	Asp	His	Pro	Ala	Asn	Ala		
145					150					155						

&lt;210&gt; 2087

&lt;211&gt; 731

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2087

gataattctc tacacggcat gagctgggga cgtaccccc ttgccaacgt cacctcacgg  
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tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt  
 120  
 aaaagaaaaa gcattgcgtc ggccaagaat tgctgtcgct gctgcaacgg ctactgcgct  
 180  
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 cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc  
 300  
 cgtgatgcag tcatcaacga tgcaaagctg cgtgccgcga ttgccggtgc gttgggttaag  
 360  
 gctggattta gttccgccga cgcggtggct ctagcgccgc gtattgccag agaaatggca  
 420  
 aaagagggcg tcctcctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg  
 480  
 ggtctgctca ctgatgcgaa gatccagcgt gctgccgctg cagtggacct cggcatcaaa  
 540  
 gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg  
 600  
 gtggtcgcaa atcttgtcgc cgccggtctg acaagaagtt ggcaaaggct acggctgtcg  
 660  
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 720  
 aggctgagat c  
 731

<210> 2088  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2088  
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 1 5 10 15  
 Leu Ile Gly Ala Gln Val Gly Leu Leu Thr Asp Ala Lys Ile Gln Arg  
 20 25 30  
 Ala Ala Ala Ala Val Asp Leu Gly Ile Lys Ala Thr Leu Ala Ala Thr  
 35 40 45  
 Ile Ile Pro Asn Ala Leu His Ser Ala Ala Phe Lys Asp Ala Val Val  
 50 55 60  
 Ala Asn Leu Val Ala Ala Gly Leu Thr Arg Ser Trp Gln Arg Leu Arg  
 65 70 75 80  
 Leu Ser Pro Leu Pro Gln Leu Arg Ser Ile Pro Leu Ser Gly Arg Ser  
 85 90 95  
 Gln Arg Leu Arg Pro Leu Arg Leu Arg  
 100 105

<210> 2089  
 <211> 315  
 <212> DNA  
 <213> Homo sapiens

<400> 2089  
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 120  
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 180  
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 240  
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 315

<210> 2090  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2090  
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 Pro His His Lys Leu Gly Glu Phe Asp Ile Asp Leu Leu Leu Asp His  
 20 25 30  
 Arg Asp Ser Arg Gln Pro Ile Ile Phe Asp Thr Asp His Phe Glu Gly  
 35 40 45  
 Tyr Glu Arg Pro Arg Leu Val Leu His Glu Val Thr Asp Gln Leu Gly  
 50 55 60  
 Gln Ala Phe Leu Val Leu Glu Gly Pro Glu Pro Ala Leu Gly Trp Glu  
 65 70 75 80  
 Ser Leu Val Ala Ser Leu Thr Ser Leu Val Asp Ser Met Gly Ile Arg  
 85 90 95  
 Leu Thr Gly Ile Thr Asp Ser Ile Pro  
 100 105

<210> 2091  
 <211> 322  
 <212> DNA  
 <213> Homo sapiens

<400> 2091  
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 120  
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 180  
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 240  
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 300  
 ccatttctgt cccttcacgc gt  
 322

<210> 2092  
 <211> 107  
 <212> PRT

<213> Homo sapiens

<400> 2092

Thr	Leu	Val	His	Cys	Leu	Cys	Leu	Cys	Val	Phe	Leu	Ser	Val	Ser	Leu
1				5					10					15	
Cys	Leu	Cys	Leu	Cys	Val	Pro	Val	Gln	Phe	Cys	Xaa	Cys	Val	Cys	Ala
			20					25					30		
His	Leu	Ser	Leu	Cys	Leu	Cys	Xaa	Ser	Leu	Cys	Leu	Phe	Cys	Leu	Cys
		35					40					45			
Leu	Ser	Leu	Cys	Leu	Cys	Pro	Phe	Trp	Ser	Leu	Leu	Ser	Phe	Leu	Cys
	50					55					60				
Val	Ser	Leu	His	Phe	Cys	Leu	Ser	Ser	Ser	Val	Ser	Leu	His	Phe	Cys
65					70					75					80
Leu	Cys	Ser	Phe	Ser	Leu	Cys	Val	Ser	Leu	Leu	Ser	Leu	Cys	Phe	Ser
				85					90					95	
Ala	Cys	Leu	Cys	Pro	Phe	Leu	Ser	Leu	His	Ala					
			100					105							

<210> 2093

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2093

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gccggcggtca tgcaaacgat caaggtggcg caatttcgcc tctgccatag tcgaaaaatg
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120
tttgcgttct ttggcggcgt accgcagcgg gttatctacg acaaccttaa aaccgcagtg
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttcctggc gttggctaata
240
cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagtt
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gagaatcaag ttcgcaacat acgc
324

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<210> 2094

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2094

Ala	Gly	Val	Met	Gln	Thr	Ile	Lys	Val	Ala	Gln	Phe	Arg	Leu	Cys	His
1				5					10					15	
Ser	Arg	Lys	Met	Phe	Val	Val	Ala	Tyr	Pro	Arg	Glu	Thr	Gln	Glu	Met
			20					25					30		
Val	Leu	Asp	Ala	His	Asn	Arg	Ala	Phe	Ala	Phe	Phe	Gly	Gly	Val	Pro
		35					40					45			
Gln	Arg	Val	Ile	Tyr	Asp	Asn	Leu	Lys	Thr	Ala	Val	Asp	Ala	Ile	Leu
	50					55					60				
Val	Gly	Lys	Asp	Arg	Ile	Phe	Asn	Arg	Arg	Phe	Leu	Ala	Leu	Ala	Asn
65					70					75					80
His	Tyr	Leu	Phe	Glu	Pro	Val	Ala	Cys	Thr	Pro	Ala	Ala	Gly	Trp	Glu

85 90 95  
Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg  
100 105

<210> 2095  
<211> 402  
<212> DNA  
<213> Homo sapiens

<400> 2095  
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120  
cgcggtggtgg gcgtgggttc agtgggcacc cactccctgg tactgctact gtccggcccc  
180  
aatgatgaac ctcttgtgct gcaagtgaag gaagccctcc ccagtgtcct caccacccat  
240  
gggaaactgc cggatgcttt ttcggaactg tccgctgggg actcctccgg gctcctcccc  
300  
gataatcttg ataagcatat taaagccggc aatggctacc ggggtggtggc gtgccagcag  
360  
attctgcagg ccactcggg tccgctgctg ggggtggacgc gt  
402

<210> 2096  
<211> 134  
<212> PRT  
<213> Homo sapiens

<400> 2096  
Pro Val Thr Asp Gln Glu Glu Ala Asp Asn Met Ile Ala Ser Phe Asp  
1 5 10 15  
Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Leu Lys Gln  
20 25 30  
Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val  
35 40 45  
Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro  
50 55 60  
Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His  
65 70 75 80  
Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser  
85 90 95  
Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly  
100 105 110  
Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro  
115 120 125  
Leu Leu Gly Trp Thr Arg  
130

<210> 2097  
<211> 641  
<212> DNA  
<213> Homo sapiens

<400> 2097  
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 480  
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 540  
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<210> 2098  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens

<400> 2098  
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 Pro Pro Pro Glu Ala Glu Gln Ala Trp Pro Gln Ser Ser Gly Glu Glu  
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 35 40 45  
 Gln Val Leu Gly Val Gln Leu Gly Leu Ser Val Arg His Pro Pro Pro  
 50 55 60  
 Arg Leu Thr Ser Gly Ser Leu Pro Ala Arg Arg Gly Pro Gly Pro His  
 65 70 75 80  
 Cys Arg Cys Ser Thr Cys Cys His Ser Ser Pro Pro Gln Ser Cys Leu  
 85 90 95  
 Ile Leu Thr Pro Pro Ser Leu Cys Val Ser Leu Ser Ala Cys Pro His  
 100 105 110  
 Trp Phe Arg Asp Pro Gln Pro Leu Phe Ile Arg Leu Tyr Leu Thr Leu  
 115 120 125  
 Ala Leu Pro Leu Thr Leu Pro Leu Ala Pro Pro Val Met Pro Leu Thr  
 130 135 140  
 Leu Ser Leu Pro Gln Pro Pro Ser Cys Gly Pro Glu Asp Asp Ala Gln  
 145 150 155 160  
 Leu Gln Leu Ala Leu Ser Leu Ser Arg Glu Glu His Asp Lys Val Arg  
 165 170 175  
 Ala Ala Ser Leu Ser Leu Pro Leu Pro Gly Ala Pro Leu Arg Pro Ala

180 185 190  
Pro Ser Pro Leu Pro Lys Ser Pro Pro Thr Ile Leu Leu Gly Pro Lys  
195 200 205  
Pro Thr Gly Ser Arg  
210

<210> 2099  
<211> 347  
<212> DNA  
<213> Homo sapiens

<400> 2099  
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120  
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tgccctcaga catccctccc cagacacttg ctgcatgacc caggaggtgg caggcagtgg  
240  
cagtattctg ttcaggtgag ctcagaggtg gcaggtgcct ggctgcggcc ctgcctcact  
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347

<210> 2100  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2100  
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35 40 45  
Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp  
50 55 60  
Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu  
65 70 75 80  
Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala  
85 90 95  
Ser Ser Pro Leu Ala His Pro Thr Trp Pro  
100 105

<210> 2101  
<211> 549  
<212> DNA  
<213> Homo sapiens

<400> 2101  
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 120  
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 180  
 taacagtgtg gttggagacc ggaacgggtgc gggatcagta tgtggcccg c tgtgacacca  
 240  
 ttggtactcc ggtccgtctg accttcgacc cagaaatcgt gggtggtggg gagggggcca  
 300  
 ttgagggcat cgggtgctgac gttgacgttg atggcgctat cgtgggtggaa acttctgacg  
 360  
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 420  
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<210> 2102  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 2102  
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 Cys Gly Leu Asn His Asp Lys Asn Glu Leu Leu Ala Ser Leu Leu Ile  
 20 25 30  
 His Leu Asp Glu Leu Leu Thr Val Trp Leu Glu Thr Gly Thr Val Arg  
 35 40 45  
 Asp Gln Tyr Val Ala Arg Cys Asp Thr Ile Gly Thr Pro Val Arg Leu  
 50 55 60  
 Thr Phe Asp Pro Glu Ile Val Gly Gly Gly Glu Gly Ala Ile Glu Gly  
 65 70 75 80  
 Ile Gly Val Asp Val Asp Val Asp Gly Ala Ile Val Val Glu Thr Ser  
 85 90 95  
 Asp Gly Arg Arg Ser Phe Asn Ala Ala Asp Val His His Leu Arg Thr  
 100 105 110  
 Arg

<210> 2103  
 <211> 459  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180

ggtatcgtcg gatgcggagc ggtcgggtgc cgggttgccg ctgtgatggc ggccatgggt  
240  
gcgaccgtgc gtgtcttcga cccgtgggcc actcctgatt cttttccagc tggcgtgatg  
300  
gcatgtgatg atctcgatga ggttctgagg ctcagccgca tcctcactct ccacgctcgt  
360  
gccaacgagg acaaccgtca catgattggc gttgaacaat tagctgagat gcctgatggc  
420  
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459

&lt;210&gt; 2104

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2104

Xaa	Arg	Val	Thr	Tyr	Thr	Pro	Gly	Arg	Asn	Ala	Thr	Ala	Thr	Ala	Glu
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His	Thr	Ile	Ala	Met	Ile	Met	Ala	Ala	Val	Arg	Gln	Ile	Pro	Ala	His
			20					25					30		
His	Glu	Leu	Leu	Ala	Ser	Gly	Val	Trp	Glu	Gly	Asp	Ala	Tyr	Arg	Tyr
		35					40				45				
Asp	Gln	Val	Gly	Met	Glu	Ile	Lys	Gly	Asn	Asp	Val	Gly	Ile	Val	Gly
	50					55					60				
Cys	Gly	Ala	Val	Gly	Cys	Arg	Val	Ala	Ala	Val	Met	Ala	Ala	Met	Gly
65					70					75				80	
Ala	Thr	Val	Arg	Val	Phe	Asp	Pro	Trp	Ala	Thr	Pro	Asp	Ser	Phe	Pro
			85					90						95	
Ala	Gly	Val	Met	Ala	Cys	Asp	Asp	Leu	Asp	Glu	Val	Leu	Arg	Leu	Ser
			100					105					110		
Arg	Ile	Leu	Thr	Leu	His	Ala	Arg	Ala	Asn	Glu	Asp	Asn	Arg	His	Met
		115					120					125			
Ile	Gly	Val	Glu	Gln	Leu	Ala	Glu	Met	Pro	Asp	Gly	Ser	Val	Leu	Val
	130					135					140				
Asn	Cys	Ala	Arg	Gly	Ser	Leu	Val	Asp							
145						150									

&lt;210&gt; 2105

&lt;211&gt; 4057

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2105

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120  
cccctatatg gctccagtcg gttttggggg gggcagctaa gtgggggagg gggaacacaa  
180  
aagtttgggc aaaacattaa cctgacaaag cttgattccg gaaaaaatc cctcaagagc  
240  
gcaaggccag cttagccaac tggcagctga gtggaaaggt tcagtcctct cgggcagctc  
300

cgggtggcacc tagaggggag aggggtgcagg ctttgaagcc agaaagacat ggatgcaagt  
360  
cttactttgc ttcttgctgt taccagttgg cctgacctta ggaaatgta tttaatctct  
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660  
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720  
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780  
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1380  
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1860  
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1920



ctttatatca attatacatt taatataatt taatttaaaa taatttaaag attcttagga  
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2340  
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2640  
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2700  
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3540

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 3900  
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 3960  
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 4020  
 gttaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa  
 4057

<210> 2106

<211> 240

<212> PRT

<213> Homo sapiens

<400> 2106

Ser	Asn	Gln	Ser	Val	Phe	Leu	Leu	Phe	Ser	Asp	Leu	Leu	Pro	Gln	Leu	1	5	10	15
Glu	Ala	Pro	Ser	Ser	Leu	Thr	Pro	Ser	Ser	Glu	Leu	Ser	Ser	Pro	Gly	20	25	30	
Gln	Ser	Glu	Leu	Thr	Asn	Met	Asp	Leu	Ala	Ala	Leu	Phe	Ser	Asp	Thr	35	40	45	
Pro	Ala	Asn	Ala	Ser	Gly	Ser	Ala	Gly	Gly	Ser	Asp	Glu	Ala	Leu	Asn	50	55	60	
Ser	Gly	Ile	Leu	Thr	Ile	Asp	Val	Thr	Ser	Val	Ser	Ser	Ser	Leu	Gly	65	70	75	80
Gly	Asn	Leu	Pro	Ala	Asn	Asn	Ser	Ser	Leu	Gly	Pro	Met	Glu	Pro	Leu	85	90	95	
Val	Leu	Val	Ala	His	Ser	Asp	Ile	Pro	Pro	Ser	Leu	Asp	Ser	Pro	Leu	100	105	110	
Val	Leu	Gly	Thr	Ala	Ala	Thr	Val	Leu	Gln	Gln	Gly	Ser	Phe	Ser	Val	115	120	125	
Asp	Asp	Val	Gln	Thr	Val	Ser	Ala	Gly	Ala	Leu	Gly	Cys	Leu	Val	Ala	130	135	140	
Leu	Pro	Met	Lys	Asn	Leu	Ser	Asp	Asp	Pro	Leu	Ala	Leu	Thr	Ser	Asn	145	150	155	160
Ser	Asn	Leu	Ala	Ala	His	Ile	Thr	Thr	Pro	Thr	Ser	Ser	Ser	Thr	Pro	165	170	175	
Arg	Glu	Asn	Ala	Ser	Val	Pro	Glu	Leu	Leu	Ala	Pro	Ile	Lys	Val	Glu	180	185	190	
Pro	Asp	Ser	Pro	Ser	Arg	Pro	Gly	Ala	Val	Gly	Gln	Gln	Glu	Gly	Ser	195	200	205	
His	Gly	Leu	Pro	Gln	Ser	Thr	Leu	Pro	Ser	Pro	Ala	Glu	Gln	His	Gly	210	215	220	
Ala	Gln	Asp	Thr	Glu	Leu	Ser	Ala	Gly	Thr	Gly	Asn	Phe	Tyr	Leu	Val				

225

230

235

240

<210> 2107  
<211> 305  
<212> DNA  
<213> Homo sapiens

<400> 2107  
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agtccctggct tggctctcgt tccagatctt aatgattctt tgagtccagt ctcaggggag  
120  
gcctcaggcc tgggtgtctga aaacaccccc agacctgatg acagcagagc tatcgctcca  
180  
gcctccctcc aaatcaccag ttcttgttct ggtgaacccc tggacctgga ttccaaggat  
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300  
ccnccn  
305

<210> 2108  
<211> 92  
<212> PRT  
<213> Homo sapiens

<400> 2108  
Met Ala Gln Val Pro Met Leu Asn Leu Leu Pro Ser Pro Gly Leu Ala  
1 5 10 15  
Leu Val Pro Asp Leu Asn Asp Ser Leu Ser Pro Val Ser Gly Glu Ala  
20 25 30  
Ser Gly Leu Val Ser Glu Asn Thr Pro Arg Pro Asp Asp Ser Arg Ala  
35 40 45  
Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro  
50 55 60  
Leu Asp Leu Asp Ser Lys Asp Val Ser Arg Pro Asp Ser Gln Gly Arg  
65 70 75 80  
Leu Cys Pro Ala Ser Asn Pro Ile Leu Ala Xaa Pro  
85 90

<210> 2109  
<211> 700  
<212> DNA  
<213> Homo sapiens

<400> 2109  
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120  
taccaagcgt ccagtgaggc tccccagcg aaacggagga acgaaacttc atttctccca  
180  
gccaagaaaa ctagtgttaa agaaactcag aggactttta aggggaacgc acaaaaaatg  
240

ttttctccaa agaagcattc ggtagcaca agtgatagaa accaggagga gagacagtgc  
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 360  
 gtaaagcagg tgcaagaaaa agtggttact tcagctgctt ttcattgagct gggcctccac  
 420  
 ccacatttaa tttccacaat aaatacggtc ttaaaaatgt ctagtatgac cagtgttcag  
 480  
 aagcaaagta ttcctgtgtt gctggaaggc agagatgctc tcgtgagatc ccagacgggc  
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 aaaatacagc gcagtgatgg cccctatgcc ctgggtgctcg tgccaacgag agaggtaagc  
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 700

<210> 2110  
 <211> 233  
 <212> PRT  
 <213> Homo sapiens

<400> 2110  
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 Asp Asn Pro Arg Thr Phe Ser Arg Arg Pro Pro Ala Gln Ala Ser Arg  
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 Gln Ala Lys Ala Thr Lys Arg Lys Tyr Gln Ala Ser Ser Glu Ala Pro  
 35 40 45  
 Pro Ala Lys Arg Arg Asn Glu Thr Ser Phe Leu Pro Ala Lys Lys Thr  
 50 55 60  
 Ser Val Lys Glu Thr Gln Arg Thr Phe Lys Gly Asn Ala Gln Lys Met  
 65 70 75 80  
 Phe Ser Pro Lys Lys His Ser Val Ser Thr Ser Asp Arg Asn Gln Glu  
 85 90 95  
 Glu Arg Gln Cys Ile Lys Thr Ser Ser Leu Phe Lys Asn Asn Pro Asp  
 100 105 110  
 Ile Pro Glu Leu His Arg Pro Val Val Lys Gln Val Gln Glu Lys Val  
 115 120 125  
 Phe Thr Ser Ala Ala Phe His Glu Leu Gly Leu His Pro His Leu Ile  
 130 135 140  
 Ser Thr Ile Asn Thr Val Leu Lys Met Ser Ser Met Thr Ser Val Gln  
 145 150 155 160  
 Lys Gln Ser Ile Pro Val Leu Leu Glu Gly Arg Asp Ala Leu Val Arg  
 165 170 175  
 Ser Gln Thr Gly Ser Gly Lys Ile Leu Ala Tyr Cys Ile Pro Val Val  
 180 185 190  
 Gln Ser Leu Gln Ala Met Glu Ser Lys Ile Gln Arg Ser Asp Gly Pro  
 195 200 205  
 Tyr Ala Leu Val Leu Val Pro Thr Arg Glu Val Ser Arg Leu Pro Phe  
 210 215 220  
 Gly Thr Ser Phe Lys His Met Leu Ser  
 225 230

<210> 2111  
<211> 339  
<212> DNA  
<213> Homo sapiens

<400> 2111  
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120  
gccgagctgg tggccctggc tgagctgttc atgccaatca agctgggtgcc gaagcaattt  
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240  
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300  
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339

<210> 2112  
<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 2112  
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Ala Val Ser Asp Gln Met Glu Ile Thr Arg Lys Ala Leu Lys Lys His  
20 25 30  
Gly Arg Gly Asn Lys Leu Ala Ile Ala Glu Leu Val Ala Leu Ala Glu  
35 40 45  
Leu Phe Met Pro Ile Lys Leu Val Pro Lys Gln Phe Glu Gly Leu Val  
50 55 60  
Glu Arg Val Arg Ser Ala Leu Glu Arg Leu Arg Ala Gln Glu Arg Ala  
65 70 75 80  
Ile Met Gln Leu Cys Val Arg Asp Ala Arg Met Pro Arg Ala Asp Phe  
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Leu

<210> 2113  
<211> 2329  
<212> DNA  
<213> Homo sapiens

<400> 2113  
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180

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1320  
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1740  
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gaaaaaattg gcaagaccaa tgtacacagt cttcagagga gcatagaaga gcatcttcca  
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 tgcgaccccg agaataaaca aagggaactc tgtaaaaata gagacgtgag caatctggag  
 1980  
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 2040  
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 2100  
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 2160  
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 2220  
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 2329

<210> 2114

<211> 758

<212> PRT

<213> Homo sapiens

<400> 2114

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Leu	His	Met	Pro	Ile	Thr	Val	Ile	Trp	Gly	Val	Ser	Pro	Glu	Asp	Asn
			20					25					30		
Gly	Asn	Pro	Leu	Asn	Pro	Lys	Ser	Lys	Gly	Lys	Leu	Thr	Leu	Asp	Ser
		35					40					45			
Ser	Phe	Asn	Ile	Ala	Ser	Pro	Ala	Ser	Gln	Ala	Trp	Ile	Leu	His	Phe
	50					55					60				
Cys	Gln	Lys	Leu	Arg	Asn	Gln	Thr	Phe	Phe	Tyr	Gln	Thr	Asp	Glu	Gln
65				70						75				80	
Asp	Phe	Thr	Ser	Cys	Phe	Ile	Glu	Thr	Phe	Lys	Gln	Trp	Met	Glu	Asn
				85						90				95	
Gln	Asp	Cys	Asp	Glu	Pro	Ala	Leu	Tyr	Pro	Cys	Cys	Ser	His	Trp	Ser
			100					105					110		
Phe	Pro	Tyr	Lys	Gln	Glu	Ile	Phe	Glu	Leu	Cys	Ile	Lys	Arg	Ala	Ile
		115					120					125			
Met	Glu	Leu	Glu	Arg	Ser	Thr	Gly	Tyr	His	Leu	Asp	Ser	Lys	Thr	Pro
	130					135					140				
Gly	Pro	Arg	Phe	Asp	Ile	Asn	Asp	Thr	Ile	Arg	Ala	Val	Val	Leu	Glu
145				150						155				160	
Phe	Gln	Ser	Thr	Tyr	Leu	Phe	Thr	Leu	Ala	Tyr	Glu	Lys	Met	His	Gln
			165						170					175	
Phe	Tyr	Lys	Glu	Val	Asp	Ser	Trp	Ile	Ser	Ser	Glu	Leu	Ser	Ser	Ala
		180						185				190			
Pro	Glu	Gly	Leu	Ser	Asn	Gly	Trp	Phe	Val	Ser	Asn	Leu	Glu	Phe	Tyr
		195					200					205			
Asp	Leu	Gln	Asp	Ser	Leu	Ser	Asp	Gly	Thr	Leu	Ile	Ala	Met	Gly	Leu
210						215					220				
Ser	Val	Ala	Val	Ala	Phe	Ser	Val	Met	Leu	Leu	Thr	Thr	Trp	Asn	Ile

225 230 235 240  
Ile Ile Ser Leu Tyr Ala Ile Ile Ser Ile Ala Gly Thr Ile Phe Val  
245 250 255  
Thr Val Gly Ser Leu Val Leu Leu Gly Trp Glu Leu Asn Val Leu Glu  
260 265 270  
Ser Val Thr Ile Ser Val Ala Val Gly Leu Ser Val Asp Phe Ala Val  
275 280 285  
His Tyr Gly Val Ala Tyr Arg Leu Ala Pro Asp Pro Asp Arg Glu Gly  
290 295 300  
Lys Val Ile Phe Ser Leu Ser Arg Val Gly Ser Ala Met Ala Met Ala  
305 310 315 320  
Ala Leu Thr Thr Phe Val Ala Gly Ala Met Met Ile Pro Ser Thr Val  
325 330 335  
Leu Ala Tyr Thr Gln Leu Gly Thr Phe Met Met Leu Ile Met Cys Ile  
340 345 350  
Ser Trp Ala Phe Ala Thr Phe Phe Phe Gln Cys Met Cys Arg Cys Leu  
355 360 365  
Gly Pro Gln Gly Thr Cys Gly Gln Ile Pro Leu Pro Lys Lys Leu Gln  
370 375 380  
Cys Ser Ala Phe Ser His Ala Leu Ser Thr Ser Pro Ser Asp Lys Gly  
385 390 395 400  
Gln Ser Lys Thr His Thr Ile Asn Ala Tyr His Leu Asp Pro Arg Gly  
405 410 415  
Pro Lys Ser Glu Leu Glu His Glu Phe Tyr Glu Leu Glu Pro Leu Ala  
420 425 430  
Ser His Ser Cys Thr Ala Pro Glu Lys Thr Thr Tyr Glu Glu Thr His  
435 440 445  
Ile Cys Ser Glu Phe Phe Asn Ser Gln Ala Lys Asn Leu Gly Met Pro  
450 455 460  
Val His Ala Ala Tyr Asn Ser Glu Leu Ser Lys Ser Thr Glu Ser Asp  
465 470 475 480  
Thr Gly Ser Ala Leu Leu Gln Pro Pro Leu Glu Gln His Thr Val Cys  
485 490 495  
His Phe Phe Ser Leu Asn Gln Arg Cys Ser Cys Pro Asp Ala Tyr Lys  
500 505 510  
His Leu Asn Tyr Gly Pro His Ser Cys Gln Gln Met Gly Asp Cys Leu  
515 520 525  
Cys His Gln Cys Ser Pro Thr Thr Ser Ser Phe Val Gln Ile Gln Asn  
530 535 540  
Gly Val Ala Pro Leu Lys Ala Thr His Gln Ala Val Glu Gly Phe Val  
545 550 555 560  
His Pro Ile Thr His Ile His His Cys Pro Cys Leu Gln Gly Arg Val  
565 570 575  
Lys Pro Ala Gly Met Gln Asn Ser Leu Pro Arg Asn Phe Phe Leu His  
580 585 590  
Pro Val Gln His Ile Gln Ala Gln Glu Lys Ile Gly Lys Thr Asn Val  
595 600 605  
His Ser Leu Gln Arg Ser Ile Glu Glu His Leu Pro Lys Met Ala Glu  
610 615 620  
Pro Ser Ser Phe Val Cys Arg Ser Thr Gly Ser Leu Leu Lys Thr Cys  
625 630 635 640  
Cys Asp Pro Glu Asn Lys Gln Arg Glu Leu Cys Lys Asn Arg Asp Val  
645 650 655  
Ser Asn Leu Glu Ser Ser Gly Gly Thr Glu Asn Lys Ala Gly Gly Lys



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<400> 2116
Met Gly Thr Cys Phe Pro Ala Pro Glu Ser Pro Pro Ser Pro His Ile
  1          5          10          15
Gly Asn Pro Val Gly Ser Arg Ser Ser Glu Pro Arg Arg Ala Glu Ala
      20          25          30
Gly Gly Pro Pro Ala Pro Ala Ala His Arg Leu Gly Met Glu Met Pro
      35          40          45
Ser Pro Gly Ser Ser Arg Gln Arg Thr Arg Glu Met Thr Thr Glu Arg
      50          55          60
His Thr Pro Ala Pro Ser His Ser Ser Pro Gln Ile Ser Pro Ser Asp
  65          70          75          80
Ala Ala Val Arg Phe Asn Val Ser Phe Leu Phe Arg Ala Gly Gly Cys

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85 90 95  
 Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu  
 100 105 110  
 Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro  
 115 120 125  
 Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu  
 130 135 140  
 Thr Arg  
 145

<210> 2117  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 2117  
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 cgcgccagcg ttaagacctt ctgcgggct gtcaccgccg atctggagaa gtgtggaccg  
 120  
 atcaggtgac actcgcggta gactgaatag atgcctgagt ctgaagacac tgtgtggctg  
 180  
 acccaagagg ccttcgataa gctcaccag gagctggagt acctcaaagg cgaaggccgc  
 240  
 accgtcattg ccaacaagat tgccgacgcc cgttcggaag gcgacctttc tgagaacggc  
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 ggctaccatg ccgcccgtga ggagcagggg caggccgagg cccgcatccg tcaactcgag  
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<210> 2118  
 <211> 70  
 <212> PRT  
 <213> Homo sapiens

<400> 2118  
 Met Pro Glu Ser Glu Asp Thr Val Trp Leu Thr Gln Glu Ala Phe Asp  
 1 5 10 15  
 Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val  
 20 25 30  
 Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu  
 35 40 45  
 Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala  
 50 55 60  
 Arg Ile Arg Gln Leu Glu  
 65 70

<210> 2119  
 <211> 465  
 <212> DNA  
 <213> Homo sapiens

<400> 2119  
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 120  
 atgggctgca agggagacgc gagcggagtt tgctataaaa tgggagttct ggttgactc  
 180  
 actgttctgt ggctgttctc ctcagtaaag gccgactcaa aagccattac aacctctctt  
 240  
 acaacaaaat ggttttccac tccattgttg ttagaagcca gtgagttttt agcagaagac  
 300  
 agtcaagaga aattttggaa tttttagaaa gccagtcaaa atattggatc atcagatcat  
 360  
 gacggtaccg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca  
 420  
 cccctccagc agaatttgtt taaattttgt ctgtcccttc acgcg  
 465

<210> 2120  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 2120  
 Met Gly Cys Lys Gly Asp Ala Ser Gly Val Cys Tyr Lys Met Gly Val  
 1 5 10 15  
 Leu Val Val Leu Thr Val Leu Trp Leu Phe Ser Ser Val Lys Ala Asp  
 20 25 30  
 Ser Lys Ala Ile Thr Thr Ser Leu Thr Thr Lys Trp Phe Ser Thr Pro  
 35 40 45  
 Leu Leu Leu Glu Ala Ser Glu Phe Leu Ala Glu Asp Ser Gln Glu Lys  
 50 55 60  
 Phe Trp Asn Phe Val Glu Ala Ser Gln Asn Ile Gly Ser Ser Asp His  
 65 70 75 80  
 Asp Gly Thr Asp Tyr Ser Tyr Tyr His Ala Ile Leu Glu Ala Ala Phe  
 85 90 95  
 Gln Phe Leu Ser Pro Leu Gln Gln Asn Leu Phe Lys Phe Cys Leu Ser  
 100 105 110  
 Leu His Ala  
 115

<210> 2121  
 <211> 336  
 <212> DNA  
 <213> Homo sapiens

<400> 2121  
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 tgtggctctc cttatgaaac taatggccct aaaacctttt acatttttgt agtcagaagt  
 120  
 ggaggttctt ttgttacaaa atacaacaag acaaactgtc agttttatgt agataatctc  
 180  
 tactattcaa ctgactatga gtttctggtc tcttttcaca atggagtgtc cgagggagat  
 240  
 tcagttataa gaaatgagtc aacaaatttt aatgctaaag ccctgattat attcctgggtg  
 300

tttctgatta ttgtgacatc aatagccttg cttggt  
336

<210> 2122  
<211> 112  
<212> PRT  
<213> Homo sapiens

<400> 2122  
Pro Asp Lys Val Asn Gly Met Lys Thr Ser Arg Pro Thr Asp Asn Ser  
1 5 10 15  
Ile Asn Val Thr Cys Gly Pro Pro Tyr Glu Thr Asn Gly Pro Lys Thr  
20 25 30  
Phe Tyr Ile Leu Val Val Arg Ser Gly Gly Ser Phe Val Thr Lys Tyr  
35 40 45  
Asn Lys Thr Asn Cys Gln Phe Tyr Val Asp Asn Leu Tyr Tyr Ser Thr  
50 55 60  
Asp Tyr Glu Phe Leu Val Ser Phe His Asn Gly Val Tyr Glu Gly Asp  
65 70 75 80  
Ser Val Ile Arg Asn Glu Ser Thr Asn Phe Asn Ala Lys Ala Leu Ile  
85 90 95  
Ile Phe Leu Val Phe Leu Ile Ile Val Thr Ser Ile Ala Leu Leu Val  
100 105 110

<210> 2123  
<211> 426  
<212> DNA  
<213> Homo sapiens

<400> 2123  
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120  
tccctgcagc cgaacgctgg ctcccagggc gagtacgccg gtctgctggc gatccgcgct  
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taccaccaga gccgtggcga tgagcgtcgc gacatctgcc tgattccgtc ctctgcccac  
240  
ggcaccaacc cggcaaccgc caacatggcc ggcattgcgc tggtcgtgac cgcttgcgac  
300  
gcccgcggca acgtcgacat cgaagacctg cgcgccaaagg ctatcgagca ccgcgaacac  
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420  
gagatc  
426

<210> 2124  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 2124  
Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln

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      1           5           10           15
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
      20           25           30
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35           40           45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50           55           60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65           70           75           80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85           90           95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100          105          110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
      115          120          125
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
      130          135          140

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&lt;210&gt; 2125

&lt;211&gt; 285

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2125

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acagtcaagc ccaatatggt tatgttacct attcaaaaca caagagggtc aagattggtt
120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaag agaggagcca aggtgagaat tcttaggaag
240
gagtcatact gggtcaaagg agtgggatca gttgtgactg ttgat
285

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&lt;210&gt; 2126

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2126

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Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
      1           5           10           15
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
      20           25           30
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35           40           45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50           55           60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65           70           75           80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85           90           95

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<210> 2127  
 <211> 454  
 <212> DNA  
 <213> Homo sapiens

<400> 2127  
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 120  
 atgcagtact gcatgatgca acaggggctt gccagcttga tggcgtgtcc gtccctgatg  
 180  
 ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg  
 240  
 acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttgccg  
 300  
 agcatgatgt cgcaaatgat gatgccacaa tgtcactgcy acgccgtctc gcagattatg  
 360  
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 420  
 ttacagcaac cctttgttgg tgctgcattc taga  
 454

<210> 2128  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 2128  
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 Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met  
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 Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln  
 35 40 45  
 Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu  
 50 55 60  
 Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met  
 65 70 75 80  
 Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro  
 85 90 95  
 Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His  
 100 105 110  
 Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met  
 115 120 125  
 Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro  
 130 135 140  
 Phe Val Gly Ala Ala Phe  
 145 150

<210> 2129  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2129

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 120  
 actatcaagg ctctccactc caaatatggg atcgggtgaac tcatccgtgc cttcagtcgg  
 180  
 gtccatgatg aacggcctaa taccgtcctt cgtatctggg gcggcggccc agacgagaat  
 240  
 cccctcaagg tcttggtcgc ccgtcttggt ccggacggtt cgggtggagt tcgcggtgcc  
 300  
 attgatcatt ctgaggtcag aaatgccttg ggtagtttgg acatctttgc cgcc  
 354

&lt;210&gt; 2130

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2130

Thr	Arg	Asp	Leu	Val	Asn	Lys	Pro	Ile	Ser	Ile	Thr	Pro	Phe	Gly	Val
1				5					10					15	
Asp	Thr	Glu	Ile	Leu	Thr	Pro	Phe	Asp	Lys	Arg	Arg	Asp	Ala	Asn	Gly
			20					25					30		
Gly	Asp	Gly	Val	Val	Arg	Ile	Gly	Thr	Ile	Lys	Ala	Leu	His	Ser	Lys
		35					40					45			
Tyr	Gly	Ile	Gly	Glu	Leu	Ile	Arg	Ala	Phe	Ser	Arg	Val	His	Asp	Glu
	50					55					60				
Arg	Pro	Asn	Thr	Val	Leu	Arg	Ile	Trp	Gly	Gly	Gly	Pro	Asp	Glu	Asn
65				70					75					80	
Pro	Leu	Lys	Val	Leu	Ala	Arg	Arg	Leu	Val	Pro	Asp	Gly	Ser	Val	Glu
			85						90					95	
Phe	Arg	Gly	Ala	Ile	Asp	His	Ser	Glu	Val	Arg	Asn	Ala	Leu	Gly	Ser
			100					105					110		
Leu	Asp	Ile	Phe	Ala	Ala										
															115

&lt;210&gt; 2131

&lt;211&gt; 324

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2131

gcatcgcggc cattgggttat gtgtgcctat tccattgggt atgtggaagg ttgggatcag  
 60  
 ccagacagtc attatgatgg tttgttacag ctgggcgagt ggggctttcg aatcaatgac  
 120  
 ctgatgaaga cggtagaggg gcgggcaggg tgcattgagt attatgaaat gctcaacgaa  
 180  
 caacgccccg acttgtctta tgacatagac ggtattgttt ataaagtga tcagattgac  
 240  
 ctgcaagaag agcttggttt tattgctcgt gcgccacgct gggcaattgc tcgaaaattt  
 300

cctgctcaag aagaagttac gcgt  
324

<210> 2132  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2132  
Ala Ser Arg Pro Leu Val Met Cys Ala Tyr Ser Ile Gly Tyr Val Glu  
1 5 10 15  
Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly  
20 25 30  
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala  
35 40 45  
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp  
50 55 60  
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp  
65 70 75 80  
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile  
85 90 95  
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg  
100 105

<210> 2133  
<211> 292  
<212> DNA  
<213> Homo sapiens

<400> 2133  
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gtggctgtct ttagaggacc cggcgaactt ttcctgcttt tteccacttg ctccatcaca  
120  
tacatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac  
180  
accagattac atcgctgtgg atccaaccct gcattttcct gcccttcctt tactgcgagt  
240  
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292

<210> 2134  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 2134  
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu  
1 5 10 15  
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr  
20 25 30  
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His  
35 40 45  
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser



50	55	60
Asn Pro Ala Phe Ser Cys	Pro Ser Phe Thr Ala	Ser Val Thr Ser Thr
65	70	75
Arg Lys Gly Leu Gln Pro	Pro Ser Phe Pro Val	Ile Tyr
85	90	

<210> 2135  
 <211> 439  
 <212> DNA  
 <213> Homo sapiens

<400> 2135  
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 120  
 gagctggccg agcgcgggcat taaccggag gcctggagcc cgctgggcca gtcgaaggac  
 180  
 ctcgacaatc ccgtcctcac cgatatttcc aaggcgactg gaaagacgcc tgcccagggtg  
 240  
 gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca  
 300  
 cgaattgccg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca  
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 439

<210> 2136  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2136  
 Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala  
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 Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser  
 20 25 30  
 Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn  
 35 40 45  
 Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro  
 50 55 60  
 Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val  
 65 70 75 80  
 Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser  
 85 90 95  
 Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu  
 100 105 110  
 Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn  
 115 120 125  
 Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe  
 130 135

<210> 2137  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 2137  
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 120  
 aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc  
 180  
 tcttccggtg agacacccgc tcagccagag aagacgagtg gcatggaggt ggcctcgtac  
 240  
 ctggtggctc agtatgggga gcagcggggc tgggacctag ccctccatac ctgggagcag  
 300  
 atggggctga ggtcactgtg cgcccaagcc  
 330

<210> 2138  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

<400> 2138  
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 1 5 10 15  
 Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala  
 20 25 30  
 His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr  
 35 40 45  
 Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln  
 50 55 60  
 Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg  
 65 70 75 80  
 Ser Leu Cys Ala Gln Ala  
 85

<210> 2139  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

<400> 2139  
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 gccgccggtg ccccgaacga cctgctggac cagcgcagcg aggcggtgcg ccagttgtcc  
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 gagctggctg ggaccaggt ggtccagcgc ggctcgagtt atgacgtcta tatcggcagc  
 240  
 ggtcagcgcc tggatgatgg caacagcacc aacaccctgt ccgcagtgcc gagcaaggac  
 300

gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga taccacctcc  
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 420  
 tcgatcaacg cgt  
 433

<210> 2140  
 <211> 144  
 <212> PRT  
 <213> Homo sapiens

<400> 2140  
 Glu Gln Leu Ser Ala Gln Asn Thr Gly Ile Asn Ser Asn Leu Ser Asp  
 1 5 10 15  
 Met Ala Gly Gln Val Asn Lys Leu Ala Ser Thr Ile Ala Gln Tyr Asn  
 20 25 30  
 Asp Gln Ile Ser Lys Val Thr Thr Ala Ala Gly Ala Pro Asn Asp Leu  
 35 40 45  
 Leu Asp Gln Arg Ser Glu Ala Val Arg Gln Leu Ser Glu Leu Val Gly  
 50 55 60  
 Thr Gln Val Val Gln Arg Gly Ser Ser Tyr Asp Val Tyr Ile Gly Ser  
 65 70 75 80  
 Gly Gln Arg Leu Val Met Gly Asn Ser Thr Asn Thr Leu Ser Ala Val  
 85 90 95  
 Pro Ser Lys Asp Asp Pro Ser Gln Ser Ala Leu Gln Leu Asp Arg Gly  
 100 105 110  
 Thr Ser Thr Val Asp Ile Thr Ser Thr Val Thr Gly Gly Glu Ile Gly  
 115 120 125  
 Gly Leu Leu Arg Tyr Arg Ser Asp Val Leu Asp Pro Ser Ile Asn Ala  
 130 135 140

<210> 2141  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 2141  
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 120  
 ggtgacccaa ttgcttgatc tgtaaataat cgtaaaggta ttaacaaagg cttgatgaaa  
 180  
 atcctgtcta aaatgggtat ttcaacgatt gcctcttatt gtggtgcgca attggttgaa  
 240  
 gcggttggtc tggataactaa agtggtcgac ctttgtttca aaggcggtgc aagtcgtatc  
 300  
 aaagggtgctc gttttgaaga tttccagcgt gatcaagcaa cgattgccaa taatgcttgg  
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 420  
 cacgcg  
 426

<210> 2142  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 2142  
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 Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp  
 20 25 30  
 Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val  
 35 40 45  
 Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys  
 50 55 60  
 Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu  
 65 70 75 80  
 Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val  
 85 90 95  
 Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln  
 100 105 110  
 Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln  
 115 120 125  
 Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala  
 130 135 140

<210> 2143  
 <211> 1008  
 <212> DNA  
 <213> Homo sapiens

<400> 2143  
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 cttctcctgc ctactgcgtg cgctgatgat gcgcaggcgc ccgttgtcga taacctcggg  
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 240  
 acgctcaaga gcacatatga gtacctccgg ctcatcgacg gtcacgatct acccgacgac  
 300  
 gatggctacg ctcatgatca tctggtcgcg gctttgcgcc cgtatttggt gaatgggtga  
 360  
 gacagtcggc aggcccacgt cacccaactc atggcggcgt catccctgaa aacctcaac  
 420  
 gcgttgctcg acaaggagag atcagaggtc gacaaacgta cccgcctgcc gaagggtgc  
 480  
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 780  
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 840  
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 900  
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<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met	Phe	Thr	Gly	Asp	Ala	Val	Val	Ile	Val	Glu	Val	Ser	Gln	Leu	Cys	1	5	10	15
His	Ile	Val	Arg	Ser	Met	Ser	Phe	Gln	Arg	Phe	Leu	Ala	Gly	Val	Ala	20	25	30	
Ala	Ile	Leu	Leu	Leu	Leu	Pro	Thr	Ala	Cys	Ala	Asp	Asp	Ala	Gln	Ala	35	40	45	
Pro	Val	Val	Asp	Asn	Leu	Gly	Thr	Val	Leu	Ser	Pro	Ser	Asn	Ser	Leu	50	55	60	
Ile	Arg	Glu	Pro	Ala	Asn	Ser	Ser	Val	Asn	Gly	Thr	Leu	Lys	Ser	Thr	65	70	75	80
Tyr	Glu	Tyr	Leu	Arg	Leu	Ile	Asp	Gly	His	Asp	Leu	Pro	Asp	Asp	Asp	85	90	95	
Gly	Tyr	Ala	His	Asp	His	Leu	Val	Ala	Ala	Leu	Arg	Pro	Tyr	Leu	Val	100	105	110	
Asn	Gly	Gly	Asp	Ser	Arg	Gln	Ala	His	Val	Thr	Gln	Leu	Met	Ala	Ala	115	120	125	
Ser	Ser	Leu	Lys	Thr	Leu	Asn	Ala	Leu	Ser	Asp	Lys	Glu	Arg	Ser	Glu	130	135	140	
Val	Asp	Lys	Arg	Thr	Arg	Leu	Pro	Lys	Gly	Cys	Ile	Thr	Arg	Lys	Thr	145	150	155	160
Val	Met	Thr	Asp	Leu	Pro	Ile	Ala	Thr	Met	Arg	Arg	Glu	Ile	Gly	Leu	165	170	175	
Ser	Asn	Asp	Gly	Leu	Cys	Leu	Thr	Pro	Trp	Lys	Val	Lys	Thr	Thr	Ser	180	185	190	
Ser	Glu	Glu	Ala	Arg	Trp	Ala	Met	Gln	Ala	Leu	Ala	Ser	Ala	Asp	Leu	195	200	205	
Phe	Ser	Asn	Ala	Lys	Asp	Ala	Glu	Lys	Trp	Gly	Trp	Glu	Ser	Ile	Ser	210	215	220	
Asp	Gly	Tyr	Leu	Arg	His	Leu	Glu	Thr	Tyr	Ser	Gly	Pro	Ser	Thr	Thr	225	230	235	240
Ile	Ala	Met	Ala	Leu	Ser	Ala	Ala	Asn	Thr	Val	Ser	Thr	Leu	Ser	Arg	245	250	255	
Ser	Gln	Leu	Gln	Arg	Ile	Gly	Asp	Ser	Leu	Ala	Asp	Ala	Pro	Tyr	Pro	260	265	270	
Arg	Lys	Asp	Leu	Gly	Pro	Ala	Leu	Ile	Arg	Asn	Gly	Lys	Pro	Val	Lys				

275 280 285  
 Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn  
 290 295 300  
 Trp Ala Trp  
 305

<210> 2145  
 <211> 389  
 <212> DNA  
 <213> Homo sapiens

<400> 2145  
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 120  
 ttatttagct cggcccagcc ttctgctgaa caactaaaat tgattaaaga gtttggttgt  
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 240  
 atttgtttag accttggttt aaattatatt catattccaa ttgattggga gatgccttct  
 300  
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 389

<210> 2146  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2146  
 Met Thr Thr Leu Glu Gln Ser Leu Ser Gln Ile Pro Ala Phe Ser Ile  
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 Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu  
 20 25 30  
 Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu  
 35 40 45  
 Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp  
 50 55 60  
 Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser  
 65 70 75 80  
 Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln  
 85 90 95  
 Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg  
 100 105

<210> 2147  
 <211> 235  
 <212> DNA  
 <213> Homo sapiens

<400> 2147

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acatgtgccc agcagctgtg gtgtcccggc cagccctgtc tcccacctgc cagtggtgtg  
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gcggaggcca cgttccgcga gggccccccc gccgcgttca gcgggcacaa cgcgt  
235

<210> 2148  
<211> 78  
<212> PRT  
<213> Homo sapiens

<400> 2148  
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1 5 10 15  
Phe Asn Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr  
20 25 30  
Cys Pro Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys  
35 40 45  
Pro Gly Gln Pro Cys Leu Pro Pro Ala Thr Cys Val Ala Glu Ala Thr  
50 55 60  
Phe Arg Glu Gly Pro Pro Ala Ala Phe Ser Gly His Asn Ala  
65 70 75

<210> 2149  
<211> 1474  
<212> DNA  
<213> Homo sapiens

<400> 2149  
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540  
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660

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 720  
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 780  
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 1020  
 aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtggaaact  
 1080  
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 1380  
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 1440  
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&lt;210&gt; 2150

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2150

Ser	Leu	Phe	Glu	Ser	Ala	Lys	Gln	Leu	Gln	Ser	Gln	Pro	Xaa	Thr	Ser
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			20					25					30		
Thr	Asp	Val	Glu	Phe	Gly	Gly	Asn	Asp	Leu	Leu	Gln	Val	Tyr	Asn	Ala
		35					40					45			
Gln	Gln	Ile	Lys	His	Arg	Leu	Asn	Ser	Thr	Gly	Met	Tyr	Val	Ala	Asn
	50					55				60					
Thr	Lys	Pro	Gly	Gly	Phe	Thr	Ile	Glu	Ile	Ser	Asn	Asn	Asn	Ser	Thr
65				70				75						80	
Met	Val	Met	Thr	Gly	Met	Arg	Ile	Gln	Ile	Gly	Thr	Gln	Ala	Ile	Glu
			85					90					95		
Arg	Ala	Pro	Ser	Tyr	Ile	Glu	Ile	Phe	Gly	Arg	Thr	Met	Gln	Leu	Asn
		100						105					110		
Leu	Ser	Arg	Ser	Arg	Trp	Phe	Asp	Phe	Pro	Phe	Thr	Arg	Glu	Glu	Ala
		115					120					125			
Leu	Gln	Ala	Asp	Lys	Lys	Leu	Asn	Leu	Phe	Ile	Gly	Ala	Ser	Val	Asp
	130					135					140				
Pro	Ala	Gly	Val	Thr	Met	Ile	Asp	Ala	Val	Lys	Ile	Tyr	Gly	Lys	Thr



145		150		155		160									
Lys	Glu	Gln	Phe	Gly	Trp	Pro	Asp	Glu	Pro	Pro	Glu	Glu	Phe	Pro	Ser
				165					170					175	
Ala	Ser	Val	Ser	Asn	Ile	Cys	Pro	Ser	Asn	Leu	Asn	Gln	Ser	Asn	Gly
			180					185					190		
Thr	Gly	Asp	Ser	Asp	Ser	Ala	Ala	Pro	Thr	Thr	Thr	Ser	Gly	Thr	Val
		195					200					205			
Leu	Glu	Arg	Leu	Val	Val	Ser	Ser	Leu	Glu	Ala	Leu	Glu	Ser	Cys	Phe
	210					215					220				
Ala	Val	Gly	Pro	Ile	Ile	Glu	Lys	Glu	Arg	Asn	Lys	Asn	Ala	Ala	Gln
225				230						235				240	
Glu	Leu	Ala	Thr	Leu	Leu	Leu	Ser	Leu	Pro	Ala	Pro	Ala	Ser	Val	Gln
			245						250				255		
Gln	Gln	Ser	Lys	Ser	Leu	Leu	Ala	Ser	Leu	His	Thr	Ser	Arg	Ser	Ala
		260						265					270		
Tyr	His	Ser	His	Lys	Val	Thr	Val	Leu	Ser	Gly	Lys	Gly	Asn	Cys	Ser
	275					280						285			
Ala	Asp	Arg	Glu	Ser	Asn	Lys	Leu	Ala	Leu	His	Cys	Lys	Ala	Thr	Ala
	290				295						300				
Gln	Gln	Ser	Lys	Val	Glu	Gly	Gly								
305					310										

&lt;210&gt; 2151

&lt;211&gt; 511

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2151

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480
ggtagcgctg tgagccaggt gttcgacgcg t
511

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&lt;210&gt; 2152

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2152

Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

1	5	10	15
Met Asp Gln Phe His Gln Ser Leu Xaa Gly Cys Arg Arg Xaa Arg Gln			
	20	25	30
His Phe His His Phe Met Gly Trp Val His Gln Arg Ser Phe Gln Leu			
	35	40	45
Thr Gly Ile Ala Asp Pro Leu Arg Ala Leu Ala Arg Glu Leu Ala Ala			
	50	55	60
Glu Val Arg Val Leu Cys Phe Asp Glu Leu Phe Val Asn Asp Ile Gly			
65	70	75	80
Asp Ala Ile Ile Leu Gly Arg Leu Phe Gln Val Met Phe Asp Ala Gly			
	85	90	95
Val Val Val Val Cys Thr Ser Asn Leu Pro Pro Asp Gln Leu Tyr Ala			
	100	105	110
Asp Gly Phe Asn Arg Asp Arg Phe Leu Pro Ala Ile Thr Ala Ile Lys			
	115	120	125
Gln His Met Gln Val Val Ala Val Asn Gly Ala Glu Asp His Arg Leu			
	130	135	140
His Pro Gly Ala Ile Glu Gln Arg Tyr Trp Val Ala Leu Pro Glu Gln			
145	150	155	160
Gly Ser Ala Leu Ser Gln Val Phe Asp Ala			
	165	170	

<210> 2153  
 <211> 528  
 <212> DNA  
 <213> Homo sapiens

<400> 2153  
 nnaccggtgc caaagagctg gggatcaacc tgccgaacac cgccggtacg cagcaggtgt  
 60  
 tcagtaagtg cacggcgatt ggcggcgga attgggacca ctccgcgctg atcaagggcc  
 120  
 tggagcatat ggccaacttt tcgattcgcg atcaataagc cacaccgctc ccacctttga  
 180  
 tggcattcca agtctgaaat tgatccatct ctaataacaa aaatccccgg gagcccgtt  
 240  
 atgtcggtcg atccgcaaca cctgcttcgc gagctgtttg ccacagccat cgatgccgcc  
 300  
 ccccccggc atgtccttga accttatctg cccgctgacc gcacaggccg tgtgattgtg  
 360  
 attgggcccg gcaaaaccgc acccgccatg gccctcgctg tcgagaacgg ctggcaaggg  
 420  
 gaagtcaccg gcctggtggt caccgctac ggccacggcg cgccgtgcaa aaaaatcgaa  
 480  
 gtggtcgagg ccgctcaccg ggtgccggat gccgccggcc tggcggtg  
 528

<210> 2154  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 2154  
 Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala

```

      1           5           10           15
Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala
      20           25           30
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro
      35           40           45
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly
      50           55           60
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu
      65           70           75           80
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val
      85           90           95

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&lt;210&gt; 2155

&lt;211&gt; 297

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2155

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gtgcaccgcc acggcacacc cgccatgccg cgccgctatt tcgaggccct gctgcaggag
60
ttcggccccg actgcgaggt gctcaccgtc accgattcag agggcaaccc cctcagttcg
120
gtgctcagtt tctacttccg tgatgaagtg ctgccctact atgcgggcga cgccgtcgcg
180
gcgcgcgaac tggcggccaa tgacttcaaa tactgggagc tgatgcgacg cgccgtgctg
240
cgcggcctca aggtgtttga ctacggccgc agcaagcagg gcacgggctc ctacgcn
297

```

&lt;210&gt; 2156

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2156

```

Met Pro Arg Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp
  1           5           10           15
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser
      20           25           30
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly
      35           40           45
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp
      50           55           60
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr
      65           70           75           80
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala
      85           90

```

&lt;210&gt; 2157

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2157

naccgagata acgagggtcgt catcatctcc actgggtccc aaggtagagcc actttcggcc  
 60  
 ctagcaagga tcgccaaccg agagcaccga gacatcgagg tgggggaggg agataccgtt  
 120  
 ttgctggcat cctctctcat cccgggtaat gagaatgccg tctatcgagt gattaatggc  
 180  
 ctgacgaagc ttggcgccgc cgtggtacat aagggaacg ctttgggtcca cgtttccggc  
 240  
 catgccgcag ccggagagct gctgtacgcg tataacatcg tgcggccacg cgctgtgatg  
 300  
 ccgattcatg gtgaggtgcg tcattctgtc gctaataccg atctggccaa agcaaccggt  
 360  
 gtcgatgaga acaacgtggt gcttgtcgag gacggcgggg ttattgacct tgttgacgga  
 420  
 gtaccgcgag ttgttgcaa ggtcgatgcc tcgtacatcc ttgttgacgg atctgggggtg  
 480  
 ggggagctta ccgaggacac gtcactgat cggcgatcc tcggtgagga gggattcttg  
 540  
 tcagtcgtca ccgtgggtcga caccgctcg gcgtcagtgg tgtctcgccc ggcatccag  
 600  
 gcgcgtgggt ttgccgaggg cgactcggtc ttcgcggaga tcaccgacca gatcgtcacc  
 660  
 gagctagaga aggcgatggc cgggtggtatg gacgataccc accggttgca a  
 711

&lt;210&gt; 2158

&lt;211&gt; 237

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2158

Xaa	Arg	Asp	Asn	Glu	Val	Val	Ile	Ile	Ser	Thr	Gly	Ser	Gln	Gly	Glu
1				5					10					15	
Pro	Leu	Ser	Ala	Leu	Ala	Arg	Ile	Ala	Asn	Arg	Glu	His	Arg	Asp	Ile
			20					25					30		
Glu	Val	Gly	Glu	Gly	Asp	Thr	Val	Leu	Leu	Ala	Ser	Ser	Leu	Ile	Pro
		35					40					45			
Gly	Asn	Glu	Asn	Ala	Val	Tyr	Arg	Val	Ile	Asn	Gly	Leu	Thr	Lys	Leu
	50					55				60					
Gly	Ala	Ala	Val	Val	His	Lys	Gly	Asn	Ala	Leu	Val	His	Val	Ser	Gly
65					70				75					80	
His	Ala	Ala	Ala	Gly	Glu	Leu	Leu	Tyr	Ala	Tyr	Asn	Ile	Val	Arg	Pro
			85					90					95		
Arg	Ala	Val	Met	Pro	Ile	His	Gly	Glu	Val	Arg	His	Leu	Val	Ala	Asn
			100					105					110		
Ala	Asp	Leu	Ala	Lys	Ala	Thr	Gly	Val	Asp	Glu	Asn	Asn	Val	Val	Leu
		115					120					125			
Val	Glu	Asp	Gly	Gly	Val	Ile	Asp	Leu	Val	Asp	Gly	Val	Pro	Arg	Val
		130				135					140				
Val	Gly	Lys	Val	Asp	Ala	Ser	Tyr	Ile	Leu	Val	Asp	Gly	Ser	Gly	Val
145				150				155						160	
Gly	Glu	Leu	Thr	Glu	Asp	Thr	Leu	Thr	Asp	Arg	Arg	Ile	Leu	Gly	Glu
			165					170					175		
Glu	Gly	Phe	Leu	Ser	Val	Val	Thr	Val	Val	Asp	Thr	Arg	Ser	Ala	Ser

<400> 2161

tcttagggga aggggaaggct tatctgaaga gtagacctct ggttttgaat gagggagaca  
 60  
 gtggggatat gaggggagga aacctcaaaa agaatatgta tccatcacta tgaaaggtta  
 120  
 ggctatacag gggaagcctc caaaggga aa tctggaaaaa tgttctgaga gggacattaa  
 180  
 ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg  
 240  
 aggagactta tatgcaaaaa tcgcaaagaa ggagagaaca aaagatggag gttggatgct  
 300  
 aaataggga agagaacgcg tgaatgaggt agggggcaga acatgcagtg cagaaaaaca  
 360  
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagttggga  
 420  
 atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaagggtggc aaagtaagag  
 480  
 ccagggcata aggttttgct gtccaggaag ctttgttgga aaaatgttag aagtaatggg  
 540  
 tttggtcagt atggtgagag gtgagagagg ctaaattggga tgggcataaa gggcaggcca  
 600  
 gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga  
 660  
 atgtggcaca gggcagaggg cagtgggctg agcagcgagt gcccatgggg aggggagtat  
 720  
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg  
 780  
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaag gaatggaaga  
 840  
 agaaagtga gggttcctgc tgatgtgagg ggatgactgg aggaaaggca ggtattgact  
 900  
 ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc  
 960  
 tggctagctg agtaaaggac catcgataa aacagacaaa agttaagact agatggagtg  
 1020  
 gcaactaggc agatcagatg tatttttaaa aggggaaact gctaagatct  
 1070

&lt;210&gt; 2162

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2162

Met	Val	Leu	Tyr	Ser	Ala	Ser	Gln	Leu	Ser	Leu	Pro	Ser	Tyr	Ser	Ile
1				5				10						15	
Ile	Thr	Leu	Ile	Gln	Glu	Trp	Phe	Leu	Tyr	Pro	Pro	Val	Asn	Thr	Cys
		20						25					30		
Leu	Ser	Ser	Ser	His	Pro	Leu	Thr	Ser	Ala	Gly	Thr	Leu	His	Phe	Leu
		35					40					45			
Leu	Pro	Phe	Leu	Ser	Ser	Ser	Phe	Cys	Pro	Arg	Glu	Ser	Cys	Cys	Tyr
	50					55					60				
Ile	Phe	Cys	Val	Pro	Pro	Ser	Phe	Ser	Cys	His	Leu	Cys	Val	Ile	Leu
65					70					75				80	
Arg	Asp	Ser	Met	Gly	Ser	Ser	Gly	Tyr	Ser	Pro	Pro	His	Gly	His	Ser

85 90 95  
 Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile  
 100 105 110  
 Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr  
 115 120 125  
 Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro  
 130 135 140  
 Tyr  
 145

<210> 2163  
 <211> 657  
 <212> DNA  
 <213> Homo sapiens

<400> 2163  
 tatttaaattc ttataaaaa aggtaggagg atcaggactt cgacccccctt aaaacgcggc  
 60  
 ggcctccctc caatccacct ccacttccta caccaccccc gctctcccc ccccccttt  
 120  
 tggttccggg ttggaagggt gggtgaaatg ggaaccgaat accaatttca cccgggaacc  
 180  
 agtaatgccc atgataaccg ccaagttggg accgaagttg ggatccataa gtacgggcgg  
 240  
 ccagtggggt ggaattgggt taagccccct cccagccttt ctccgaccgc gtgctccgtc  
 300  
 agacatgcca agaggctctc tctccaggag agccacctgt gaaacccacc cggcatgctc  
 360  
 ctcccaccac tgtgcacaga cgagtgcctg ggctccagag agggagggag ctgaaggcct  
 420  
 cagacaggag tccgtcccgt ccagtcccat catcccaaga aacatccggc ccgactccct  
 480  
 gcagctccat ggctcaacaa ggtgcggatg cctgctggac ctggctgctt tccatccaac  
 540  
 tttgatccct tccccagag gaagagtgt acctagggac aagtgtggtg cgcacaggca  
 600  
 tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg  
 657

<210> 2164  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

<400> 2164  
 Met/Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser  
 1 5 10 15  
 Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe  
 20 25 30  
 Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg  
 35 40 45  
 Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala  
 50 55 60  
 Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

```

65          70          75          80
Gln Glu Ser Val Pro Ser Ser Pro Ile Ile Pro Arg Asn Ile Arg Pro
          85          90          95
Asp Ser Leu Gln Leu His Gly Ser Thr Arg Cys Gly Cys Leu Leu Asp
          100          105          110
Leu Ala Ala Phe His Pro Thr Leu Ile Pro Ser Pro Arg Gly Arg Val
          115          120          125
Leu Pro Arg Asp Lys Cys Gly Ala His Arg His Ala Ala Trp Ser Leu
          130          135          140
Ala Gln Ala Ala Cys Ala Asp Ser
145          150

```

<210> 2165  
 <211> 962  
 <212> DNA  
 <213> Homo sapiens

<400> 2165  
 nctttctcat cgacagcgac gcacaaccgg cgacatcacc ggtgacgggt caaggtggca  
 60  
 gcccgagggc ccgccgtgaa cttattgtgt cgtcttatgg aagaaaagtc actcggaagt  
 120  
 accgtaaate accccagcgc ctcattcccc gaatctgttc gccatctgct gtcgccccctg  
 180  
 cgcttaaggc atcacccac tagactgacc gaagtctcgc cgagggaggc tagggaggct  
 240  
 taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg  
 300  
 tcgagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga  
 360  
 ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac  
 420  
 tcctggttcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgctca  
 480  
 ggtattgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta cteccccacc  
 540  
 gacgtcttcg acgtggcgcc ccggtccatg acccgcaaga tctccttgca ccagacagtc  
 600  
 gagctcgtcc gcaccacgat tgacgtcgtt gaggcacaaa ttgagaccga aatgccacgc  
 660  
 ggtgatcgcc aagtgtcgc cactgccatc gttcactact cccgcgaggt ggccttcgcc  
 720  
 gccgccgagg ttacgcgcg agccgccgaa cgtcgcggta cctgggatga acgtctggaa  
 780  
 tcctcgtcgt ttgatgccgt cgtgcgagcc gacgccgatg aacagctcat ctgcgagct  
 840  
 tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcgggcg ggccccgacg  
 900  
 accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacggtgcta  
 960  
 gc  
 962

<210> 2166



<211> 239  
 <212> PRT  
 <213> Homo sapiens

<400> 2166  
 Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser  
 1 5 10 15  
 Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr  
 20 25 30  
 Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr  
 35 40 45  
 Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp  
 50 55 60  
 Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly  
 65 70 75 80  
 Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Asp Ala Glu Pro Tyr  
 85 90 95  
 Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys  
 100 105 110  
 Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val  
 115 120 125  
 Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val  
 130 135 140  
 Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala  
 145 150 155 160  
 Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu  
 165 170 175  
 Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp  
 180 185 190  
 Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile  
 195 200 205  
 Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu  
 210 215 220  
 His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu  
 225 230 235

<210> 2167  
 <211> 325  
 <212> DNA  
 <213> Homo sapiens

<400> 2167  
 accggtgcag tttgtgaggg gttggtgacg cccgatcggg aggttcacgc cgtcacggcg  
 60  
 catccacatt atcccgaactg gaagatctcg ccagggttacg gacagtgggc gcgtagcgaa  
 120  
 cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcggcg tcccacggcg  
 180  
 attcttcgag cgggtgtctga ggtgacgttc gggttgcgtc tctgcgccgt ccgttggcga  
 240  
 agcaccgcgg cgattgtggc tgtgtcgccg gccttgctct cgacgcggtc gcgcggggtcg  
 300  
 tgcgctgac tcccacagca taccc  
 325

<210> 2168  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2168  
 Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His  
 1 5 10 15  
 Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly  
 20 25 30  
 Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr  
 35 40 45  
 Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala  
 50 55 60  
 Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg  
 65 70 75 80  
 Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg  
 85 90 95  
 Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr  
 100 105

<210> 2169  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<400> 2169  
 gaggacgcct acgtgctcat caccaggggc aagatctcgg cgatcgccga cgtcctgccg  
 60  
 atcctggaga aggtcgtcaa ggccggcaag ccgctgctcg tcatcgccga ggacatcgac  
 120  
 ggggaggccc tgtccaccct cgtcgtcaat aagatccgcg gtaccttcag ctcggtggca  
 180  
 gtcaaggcgc ccggcttcgg tgaccgccgc aaggcaatgc tgcaggacat cgccaccctc  
 240  
 accggtggtc aggtcgtcgc tcccagaggtt gggctcaagc tcgaccaggt gggcctcgag  
 300  
 gttcagggc  
 309

<210> 2170  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 2170  
 Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala  
 1 5 10 15  
 Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu  
 20 25 30  
 Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val  
 35 40 45  
 Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro

50		55		60
Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu				
65		70		75
Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln				80
	85		90	95
Val Gly Leu Glu Val Gln Gly				
100				

<210> 2171  
 <211> 518  
 <212> DNA  
 <213> Homo sapiens

<400> 2171  
 cgcgtaatgt gtattaaggt ccttggtggc tcgcatcgcc gttatgcagc aatcgggtgat  
 60  
 atcatcaaag tttcagtgaa ggaagcaatt cctcgcggaa aaattaaaaa aggtaatgtt  
 120  
 cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt  
 180  
 cgttttgatc gcaacgcagc ggttatcttg aatgcaaaca accagccagt cggtacacgt  
 240  
 atctttggcc ctgtaacccg tgagcttcga aatgaaaatt tcatgaagat tgtttcactg  
 300  
 gcgccagaag tactgtaagg aaccgaaaat ggcagcaaaa ataaaacgtg acgatgaagt  
 360  
 aattgttatt gccggtaaag ataaaggtaa aactgggaaa gtttctcaag ttttaactaa  
 420  
 cggtaaagta attattgaag gtgtaaattgt tcaaaagaaa caccaaaaac caaacctca  
 480  
 agcgggctg gaaggcggaa tcattgaaca gaatgcat  
 518

<210> 2172  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2172
Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala
1 5 10 15
Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg
20 25 30
Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Val Arg Thr
35 40 45
Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg
50 55 60
Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg
65 70 75 80
Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys
85 90 95
Ile Val Ser Leu Ala Pro Glu Val Leu
100 105

<210> 2173  
 <211> 475  
 <212> DNA  
 <213> Homo sapiens

<400> 2173  
 nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag  
 60  
 cgggcgcgtg ccttttgcgg cgggggtttcg agcattcatc tggatgcacg attttcgcat  
 120  
 gcatttcttg taccctcgtc atgcgtttct ccccatgcac acacattatc gcctttgcac  
 180  
 ccgcagggac gcatggaata cctcgtgaaa tggaagggat ggtcgcagaa gtacagcaca  
 240  
 tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaagggaa  
 300  
 agagagatgg agctctatgg ccccaaaaag cgtggacca agcccaaaac cttcctctc  
 360  
 aaagcgcagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgactc agccaggggc  
 420  
 atccggatcc cctaccctgg ccgctcgccc caggacctgg cctccacttc ccggg  
 475

<210> 2174  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 2174  
 Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala  
 1 5 10 15  
 Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile  
 20 25 30  
 His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Ser Cys  
 35 40 45  
 Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg  
 50 55 60  
 Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr  
 65 70 75 80  
 Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe  
 85 90 95  
 Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly  
 100 105 110  
 Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala  
 115 120 125  
 Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro  
 130 135 140  
 Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg  
 145 150 155

<210> 2175  
 <211> 462  
 <212> DNA  
 <213> Homo sapiens

<400> 2175  
cgcgacaccc tctttggtgg gcgccttcct tctccgaatt cgcgaaacct ccagactctg  
60  
gcccaggagg ttgtcgagcg tggagccgat atcggcattg ccactgatgg tgacgcagac  
120  
cgcttcggta tcattgatga ccaggggcat ttcttgcata ccaaccagat cctcgtattg  
180  
ctgtacacct accttctgga ggacaaggga tggcaggtgc cctgcgtgcg taacctcgcg  
240  
acgacccacc tgcttgaccg tgtcgccgag gccacgggc agacctgtta cgaggtaccg  
300  
gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cggtggtgag  
360  
tcctccggtg gtttgaccgt ccaggggcat attgcaggca aggatggtgt ctatgctggc  
420  
accctgctgg tggaaatgat cgccaagcgg ggtaagaagc tt  
462

<210> 2176  
<211> 154  
<212> PRT  
<213> Homo sapiens

<400> 2176  
Arg Asp Thr Leu Phe Gly Gly Arg Leu Pro Ser Pro Asn Ser Arg Thr  
1 5 10 15  
Leu Gln Thr Leu Ala Gln Glu Val Val Glu Arg Gly Ala Asp Ile Gly  
20 25 30  
Ile Ala Thr Asp Gly Asp Ala Asp Arg Leu Gly Ile Ile Asp Asp Gln  
35 40 45  
Gly His Phe Leu His Pro Asn Gln Ile Leu Val Leu Leu Tyr Thr Tyr  
50 55 60  
Leu Leu Glu Asp Lys Gly Trp Gln Val Pro Cys Val Arg Asn Leu Ala  
65 70 75 80  
Thr Thr His Leu Leu Asp Arg Val Ala Glu Ala His Gly Gln Thr Cys  
85 90 95  
Tyr Glu Val Pro Val Gly Phe Lys Trp Val Ser Ser Lys Met Ala Glu  
100 105 110  
Thr Asn Ala Val Ile Gly Gly Glu Ser Ser Gly Gly Leu Thr Val Gln  
115 120 125  
Gly His Ile Ala Gly Lys Asp Gly Val Tyr Ala Gly Thr Leu Leu Val  
130 135 140  
Glu Met Ile Ala Lys Arg Gly Lys Lys Leu  
145 150

<210> 2177  
<211> 478  
<212> DNA  
<213> Homo sapiens

<400> 2177  
ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg  
60

accttgact cgattgtcgg cgtgctggcc ggggcacccct ggtatcagcg ggagatccac  
 120  
 gacttttttg gtgtgaggtt tgtcggccct ggggcagatg atcgtgccct ccttgtccac  
 180  
 gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcgagc tgacaccgtg  
 240  
 tggccgggtg cggctgacca ggctggctcg aagtccgcga gtcgacgtct gccggtcggc  
 300  
 gttcctgacc ctgagacgtg gcggcgtatc aaagacggcg aggatattcc ggatgccgag  
 360  
 gtcacgcgg ccatgtctgg ccggcgcccg cgatcagctg cccgtcgaat ggcaagcacg  
 420  
 gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac  
 478

<210> 2178

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2178

Leu	Glu	Asn	His	Asp	Gly	Asp	Asp	Val	Thr	Ile	Ser	Thr	Arg	Val	Pro
1				5				10						15	
Arg	Asp	Gly	Gly	Thr	Leu	Asp	Ser	Ile	Val	Gly	Val	Leu	Ala	Gly	Ala
			20					25					30		
Ser	Trp	Tyr	Gln	Arg	Glu	Ile	His	Asp	Phe	Phe	Gly	Val	Arg	Phe	Val
	35						40					45			
Gly	Pro	Gly	Ala	Asp	Asp	Arg	Ala	Leu	Leu	Val	His	Asp	Ala	Pro	Lys
	50					55					60				
Pro	Pro	Leu	Arg	Lys	Glu	Ala	Val	Leu	Ala	Gln	Arg	Ala	Asp	Thr	Val
65					70					75				80	
Trp	Pro	Gly	Ala	Ala	Asp	Gln	Ala	Gly	Ser	Lys	Ser	Ala	Ser	Arg	Arg
			85					90					95		
Leu	Pro	Val	Gly	Val	Pro	Asp	Pro	Glu	Thr	Trp	Arg	Arg	Ile	Lys	Asp
			100					105					110		
Gly	Glu	Asp	Ile	Pro	Asp	Ala	Glu	Val	Ile	Ala	Ala	Met	Ser	Gly	Arg
		115					120					125			
Arg	Pro	Arg	Ser	Ala	Ala	Arg	Arg	Met	Ala	Ser	Thr	Ala	Ser	Gly	Arg
	130					135					140				
Gln	Ala														
145															

<210> 2179

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2179

gtgcacttcc gagtggacgt cgagcgtcgc attaacgggg ccggcgcggt gggcgcacac  
 60  
 aagacgtcga tgctgcagga tctggacngc gaccgcgcga tggagatcga cccgctcgtc  
 120  
 tccgtcgttc aggagatggg acgcctggcc aacgtgccga cgcccacgct cgatgtcgtg  
 180

ctcccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag  
 240  
 gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggn  
 296

<210> 2180  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 2180  
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala  
 1 5 10 15  
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg  
 20 25 30  
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg  
 35 40 45  
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile  
 50 55 60  
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln  
 65 70 75 80  
 Glu Arg Leu Ala Lys Ala Ala  
 85

<210> 2181  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2181  
 ngcgcgccgg gatggatcat agtctggctc gatgcatcac gtgcgcgcat gcgcgcgctg  
 60  
 tcgattcccg acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacgcacctc  
 120  
 acgctggcat cgccggaagc ggggtgctgc agcgaactga acgtgcgcga cgggtgcgatg  
 180  
 gtcgcgccgg ggcagacgct cgcgaagatt tcgggcctct cgaagctctg gctgatcgtc  
 240  
 gagattccgg aagcgctcgc gctcgatgcy cgtccgggca tgaccgtcga cgcgacgttc  
 300  
 tcgggcgatc cgacgcagca tttcaccggg cgtatccgcy agatcctgcc gggcatcacc  
 360  
 accagtagcc gcacgcttca ggcgcgc  
 387

<210> 2182  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 2182  
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg  
 1 5 10 15  
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

```

                20                25                30
Thr Gly Lys Ala Gln Thr His Leu Thr Leu Ala Ser Pro Glu Ala Gly
                35                40                45
Val Val Ser Glu Leu Asn Val Arg Asp Gly Ala Met Val Ala Pro Gly
                50                55                60
Gln Thr Leu Ala Lys Ile Ser Gly Leu Ser Lys Leu Trp Leu Ile Val
65                70                75                80
Glu Ile Pro Glu Ala Leu Ala Leu Asp Ala Arg Pro Gly Met Thr Val
                85                90                95
Asp Ala Thr Phe Ser Gly Asp Pro Thr Gln His Phe Thr Gly Arg Ile
                100                105                110
Arg Glu Ile Leu Pro Gly Ile Thr Thr Ser Ser Arg Thr Leu Gln Ala
                115                120                125
Arg

```

<210> 2183  
 <211> 310  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2183
aagcttgaaa aacaaatttg tgcacagtct gataacccaa aaatgactga tggattggct
60
ctgcattttc caagcagggg ggggtcgggc atggagaatg aaacattctg agaaaagact
120
taaagtgtga aacttttggg tcaagagggt attctaggag atacaagaaa tatctcctgg
180
gggcatccaa aggggaataac actgtaatct tgagtgatgt atggttccat tgcccagagga
240
ataggggatga aaaccataaa ctcttttggg tgggtattaa cttatcantc aaagttacca
300
tanataatgg
310

```

<210> 2184  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2184
Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp
1                5                10                15
Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile
                20                25                30
Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu
                35                40                45
Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu
50                55                60
Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala
65                70                75                80
Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe
                85                90                95
Val Phe Gln Ala

```



100

<210> 2185  
 <211> 723  
 <212> DNA  
 <213> Homo sapiens

<400> 2185  
 ngaatatcca tgcagcagct cgtcgacaat tttgacgggtg ccatccctga cgatcttgac  
 60  
 tctctgtga ccctgcccgg agtcggctcgt aagaccgcca atgttggtttt aggtaatgcc  
 120  
 ttccggcatcc ccggaatcac cccggacacc cacgtcatgc gggatatctcg acgtctgggc  
 180  
 tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgaccgc  
 240  
 tctgaatggg tgatgttggtg tcaccgcctc atctggcacg ggcggcggcg ctgtcactcg  
 300  
 cggcgtcctg cctgcgggggt atgcccgggtt gccgagtggg gcccgtcctt cggggaaggc  
 360  
 ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgtcgatg agggggatga  
 420  
 acgttttcgg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatgcgggca  
 480  
 tagctcatca gcgtgaaaat gccggaatac cggggtgctc gcatttgccg tcggggccga  
 540  
 ttgcgaaaag ttccggggccg gccacagagg gccggcccat gccgatcac ggcttgcaat  
 600  
 gccttggtga ggggcgcgac atctccatgt ctccggcgac atcgaggggc gtgaccgtcg  
 660  
 tgacgatctg ggcgtcgtgg tgtcgacccat gtcgtagtga ggctccgctc attgcgaacg  
 720  
 cgt  
 723

<210> 2186  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 2186  
 Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro  
 1 5 10 15  
 Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr  
 20 25 30  
 Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro  
 35 40 45  
 Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala  
 50 55 60  
 Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro  
 65 70 75 80  
 Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg  
 85 90 95  
 Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

	100		105		110										
Trp	Cys	Pro	Ser	Phe	Gly	Glu	Gly	Pro	Thr	Asp	Pro	Glu	Glu	Ala	Ala
	115				120							125			
Thr	Leu	Val	Arg	Glu	Pro	Arg	Arg								
	130					135									

<210> 2187  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens

<400> 2187  
 nnacgcgtga aggatgcgcc ccggtcgacc ggccatccgt cttgcctcgc aggcattccag  
 60  
 cccgccatat gctgcaaccg caacaccgct ttgccgtcgc atggcatctc cactccggat  
 120  
 cgcattgatc cactgagggt atcggcgcca aagaagttgc cggggcaaaa tcccggcgag  
 180  
 gaaagcccga tggagtggaa gacgctgctc aacgacaccc gcttcggagg ggtcgccagc  
 240  
 ctcgatggga cgcgcggacg gtcggagttc cagaaggacc acgaccggat catcttctcc  
 300  
 gaagccttcc gcaagctggg ccgcaagacc caggtgcacc cg  
 342

<210> 2188  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

<400> 2188															
Met	Glu	Trp	Lys	Thr	Leu	Leu	Asn	Asp	Thr	Arg	Phe	Gly	Gly	Val	Ala
1				5					10					15	
Ser	Leu	Asp	Gly	Thr	Arg	Gly	Arg	Ser	Glu	Phe	Gln	Lys	Asp	His	Asp
			20				25						30		
Arg	Ile	Ile	Phe	Ser	Glu	Ala	Phe	Arg	Lys	Leu	Gly	Arg	Lys	Thr	Gln
		35					40					45			
Val	His	Pro													
		50													

<210> 2189  
 <211> 1412  
 <212> DNA  
 <213> Homo sapiens

<400> 2189  
 ntcgcttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg  
 60  
 cgttcttcca cgcgatgcta gatgccgggg tcaacctgcc gccatcgtgc tttgaggcct  
 120  
 ggttcctctc ggacgctcac gacgacgaag ctttcgaggt tttccgcgcc gccctgccga  
 180  
 gggctgcca ggcggctgcc caggtgatca gtgcctgaca ccgggctgac ttcgcaggtc  
 240

atcgaggcaa tctgtgcctg gttcgacgcc aacggacgcg atctgccgtg gcgccgaccc  
 300  
 ggcacctccg cgtggggcgt gcttgtagc gaggtcatga gccaacagac cccgatgtcc  
 360  
 cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccaccctga tgatttggcg  
 420  
 gaggaggact ctggggaagc ggttgccgcg tgggggcgcc tgggttaccg gcgtcgggccc  
 480  
 ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgcccac  
 540  
 agtgacgacg agctcgtcgc cctcccgggt attggcgact acaccgagc gcgagtcgtc  
 600  
 tcttttgcgt ttggcggccg cgccacagtg cttgacacca atgtacgtcg cctcatcgct  
 660  
 agagcagagt ctgggatcgc aaactgtcca acctcgggtga cgagggtga gcgggtagtc  
 720  
 gccgacgcgt tgggtcccg cgaagacgtc cgagcggcca agtgggcgggt ggcgtcgatg  
 780  
 gaattggggg cactgggatg cacggcgcggt tctccgcagt gtgaggtctg cccgatccgg  
 840  
 gatggctgca ggtgggtgat cgacggtagg ccggacaatg ccccggcccg tcgaggacag  
 900  
 ccatggaagg gcacggatcg ccagtgccgc ggcgtgatta tggacgtggt gcgcaacagc  
 960  
 cctcacgggg tgaagggtcca gatggctctt tccgcctggc ccgagctcga tcaggcatca  
 1020  
 aggtgcctgg aatccttact cgatgacgggt ttagtgcacc gacgaggtaa ccttattagc  
 1080  
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc  
 1140  
 cgctgggtta tccttagagg cggtcctcaa attggatcag ccaaaccacg tcaccgatca  
 1200  
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgccc gacgccgaca  
 1260  
 cattgtcgac catctgcgtt ctttggggca ctcggagtcc atcggagatc tttaccaact  
 1320  
 gttcgggtgc tctacatcga cgattcgccg cgatgtcgat gccctctcgg atgaatccaa  
 1380  
 gatctggaag atttccgggg gagacgtcat ga  
 1412

&lt;210&gt; 2190

&lt;211&gt; 292

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10						15	
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
			20					25					30		
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
		35					40					45			
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

```
<210> 2191
<211> 502
<212> DNA
<213> Homo sapiens
```

1620

gctgggattg ccggtggtgc ac  
502

<210> 2192  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 2192  
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile  
1 5 10 15  
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu  
20 25 30  
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp  
35 40 45  
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys  
50 55 60  
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu  
65 70 75 80  
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val  
85 90 95  
Glu Ala Gly Ile Ala Gly Gly Ala  
100

<210> 2193  
<211> 321  
<212> DNA  
<213> Homo sapiens

<400> 2193  
ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc  
60  
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggaccaaac  
120  
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca  
180  
agtcatgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgcccaga  
240  
cagaggtccc actgccctgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc  
300  
tgtgtgtgtt taggttgggg a  
321

<210> 2194  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2194  
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala  
1 5 10 15  
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu  
20 25 30  
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

```

          35          40          45
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
      50          55          60
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
65          70          75          80
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
          85          90          95
Val Cys Val Leu Cys Val Phe Arg Leu Gly
      100          105

```

<210> 2195  
 <211> 504  
 <212> DNA  
 <213> Homo sapiens

<400> 2195  
 nacgcgtctc cctacatcaa tgcccaccgc gattgcacct ttgttgatcat gctccctggc  
 60  
 gacgggtgtgg cacaccccaa ctttggcaat atcgtccacg acctgggtgct gttgcacagc  
 120  
 ctgggtgtgc gtctggtact ggtccacggt tcgcgcccgc agatcgacag ccgccttgag  
 180  
 gcacgaggcc tgggtgccgta ttaccacaag ggcattgcgtg tcaccgatgc atcaacgctc  
 240  
 gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg  
 300  
 gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc  
 360  
 actgcgcggc cgatcggcgt gctcgacggt gtggattttc accataccgg cgaagtgcgc  
 420  
 cgggtggacc gcaagggcat caaccgcctg ctcgatgagc gctcgattgt gctgctgtcg  
 480  
 cccttggggtt actcgccac cggt  
 504

<210> 2196  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2196
Xaa Ala Ser Pro Tyr Ile Asn Ala His Arg Asp Cys Thr Phe Val Val
  1          5          10          15
Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
      20          25          30
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
      35          40          45
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
      50          55          60
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
65          70          75          80
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
      85          90          95
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Met Gln Gly Ser Arg Leu

```

```

          100          105          110
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
          115          120          125
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
          130          135          140
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
145          150          155          160
Pro Leu Gly Tyr Ser Pro Thr Gly
          165

```

&lt;210&gt; 2197

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2197

```

acaagtccgt cgacgattcg ctttccggag gcgggcccag gaatggtaat gaaacccgag
60
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cggtgctgtt
180
ccgaaacgct acgatggctg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
240
cttgtgccta gcccggtggt tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351

```

&lt;210&gt; 2198

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2198

```

Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
  1          5          10          15
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
          20          25          30
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
          35          40          45
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
          50          55          60
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
65          70          75          80
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
          85          90          95
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
          100          105          110
Gly Ile Asp Gln Arg
          115

```

&lt;210&gt; 2199

&lt;211&gt; 457

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2199

agacgccggc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca  
60  
ggagcccggg agaagggctg gaaggagggg actggacgtg cggagaattc cccctaaaa  
120  
ggcagaagcc cccgccccca ccctccgagc tccgttcggg cagagcgcct gcctgcctgc  
180  
cgttgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag  
240  
atccctttct gcgacgcaa ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc  
300  
ggcgggcccg agaggccagg cgcgcgcggg cagcggcaga acatcgtctg gaggaatgtc  
360  
gtcctgatga gcttgctcca cttggggggc gtgtactccc tgggtgctcat ccccaaagcc  
420  
aagccactca ctctgctctg gggtaagtcc cgccggc  
457

&lt;210&gt; 2200

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2200

Arg	Arg	Arg	Pro	Pro	Arg	Ser	Ala	Ser	Leu	Gly	His	Ala	Lys	Thr	Leu
1				5					10					15	
Gly	Lys	Ser	Ala	Gly	Ala	Arg	Glu	Lys	Gly	Trp	Lys	Glu	Gly	Thr	Gly
			20					25					30		
Arg	Ala	Glu	Asn	Ser	Pro	Leu	Lys	Gly	Arg	Ser	Pro	Arg	Pro	His	Pro
		35					40					45			
Pro	Ser	Ser	Val	Arg	Ala	Glu	Arg	Leu	Pro	Ala	Cys	Arg	Cys	Trp	Gly
	50					55					60				
Arg	Pro	Pro	Arg	Pro	Ala	Met	Pro	Gly	Pro	Ala	Thr	Asp	Ala	Gly	Lys
65					70					75				80	
Ile	Pro	Phe	Cys	Asp	Ala	Lys	Glu	Glu	Ile	Arg	Ala	Gly	Leu	Glu	Ser
				85					90					95	
Ser	Glu	Gly	Gly	Gly	Gly	Pro	Glu	Arg	Pro	Gly	Ala	Arg	Gly	Gln	Arg
			100					105					110		
Gln	Asn	Ile	Val	Trp	Arg	Asn	Val	Val	Leu	Met	Ser	Leu	Leu	His	Leu
		115					120					125			
Gly	Ala	Val	Tyr	Ser	Leu	Val	Leu	Ile	Pro	Lys	Ala	Lys	Pro	Leu	Thr
	130					135					140				
Leu	Leu	Trp	Gly	Lys	Ser	Arg	Arg								
145					150										

&lt;210&gt; 2201

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2201



agtactgcga tggacagcta tgtcgtggat ggtggtcgca aattacatgt ttgtggtaac  
60  
aaccttgatt gcgatggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat  
120  
ggtcgcgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt  
180  
ggcccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa  
240  
cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat  
300  
gatttcttcg tcttacgtga gggcgctgct ggttta  
336

<210> 2202  
<211> 112  
<212> PRT  
<213> Homo sapiens

<400> 2202  
Ser Thr Ala Met Asp Ser Tyr Val Val Asp Gly Gly Arg Lys Leu His  
1 5 10 15  
Val Cys Gly Asn Asn Pro Asp Cys Asp Gly Tyr Glu Val Glu Glu Gly  
20 25 30  
Glu Phe Lys Ile Lys Gly Tyr Asp Gly Pro Thr Ile Pro Cys Asp Lys  
35 40 45  
Cys Asp Gly Glu Met Gln Leu Lys Thr Gly Arg Phe Gly Pro Tyr Phe  
50 55 60  
Ala Cys Thr Ser Cys Asp Asn Thr Arg Lys Val Leu Lys Ser Gly Gln  
65 70 75 80  
Pro Ala Pro Pro Arg Val Asp Pro Ile Lys Met Glu His Leu Arg Ser  
85 90 95  
Thr Lys His Asp Asp Phe Phe Val Leu Arg Glu Gly Ala Ala Gly Leu  
100 105 110

<210> 2203  
<211> 273  
<212> DNA  
<213> Homo sapiens

<400> 2203  
ctcgagagat gcagtcccag ccgggggtggg aagctgtgca gacagccccg gatctgggac  
60  
gtgatggaaa actcaacaga ctggttcaga tcttggcccc gagcccagag gcaccgggga  
120  
ccccagggc tgtttctccc tggccacacc agtaccctac ttccaaatgc cctgtagggtg  
180  
accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc  
240  
ctgtccctgc ctccctccga tgtcctgatg gtg  
273

<210> 2204  
<211> 88  
<212> PRT

<213> Homo sapiens

<400> 2204

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Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1             5             10             15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
 20             25             30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
 35             40             45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
 50             55             60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
 65             70             75             80
Ala Ser Leu Arg Cys Pro Asp Gly
                        85

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<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

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gnnnnnngng nnnnactggt gtgcatgggt aaaatcctgc aagctactgg gttgccacag
60
catctgtccc actttgtggt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgctcctg aagtggacac ctctcctct tccgtcagca aggagccgca ctgcatgggt
180
gtctttgatc attgcaatga gttttctggt aacatcacgc aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
cccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

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<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

```

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1             5             10             15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
 20             25             30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
 35             40             45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
 50             55             60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
 65             70             75             80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```

				85					90					95					
Pro	Arg	Lys	Asn	Pro	Ala	Leu	Trp	Asp	Leu	Gly	Ile	Ile	Gln	Ala	Lys				
			100					105					110						
Thr	Arg	Ser	Leu	Arg	Asp	Arg	Trp	Ser	Glu	Val	Pro	Arg	Lys	Leu	Glu				
		115					120						125						

Phe

<210> 2207  
 <211> 667  
 <212> DNA  
 <213> Homo sapiens

<400> 2207  
 atctccaacc ccgagaccct ctccaataca gccggcttcg agggctacat cgacctgggc  
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 cgcgagctct ccagcctgca ctactgctc tgggaggccg tcagccagct ggagcagagc  
 120  
 atagtatcca aactgggacc cctgcctcgg atcctgaggg acgtccacac agcactgagc  
 180  
 accccaggta gcgggcagct cccagggacc aatgacctgg cctccacacc gggctctggc  
 240  
 agcagcagca tctcagctgg gctgcagaag atggtgattg agaacgatct ttccggtctg  
 300  
 atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttgtt ttttgtcaca  
 360  
 aggtcctcgc gggtcagcc ctcacctgcc cgcagctcga gttactcgga agccaacgag  
 420  
 cctgatcttc agatggccaa cggtggcaag agcctctcca tgggtggacct ccaggacgcc  
 480  
 cgcacgctgg atggggaggg aggtcccccg gcggggcccc acgtcctccc cacagatggg  
 540  
 caggccgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg  
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 gcagggctgg ccacggtgcg gcgggcaggc cagacaccaa ccacaccagg cacctccgag  
 660  
 ggcgcgc  
 667

<210> 2208  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

<400> 2208  
 Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr  
 1 5 10 15  
 Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu  
 20 25 30  
 Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu  
 35 40 45  
 Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser  
 50 55 60  
 Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly

65		70		75		80									
Ser	Ser	Ser	Ile	Ser	Ala	Gly	Leu	Gln	Lys	Met	Val	Ile	Glu	Asn	Asp
				85					90					95	
Leu	Ser	Gly	Leu	Ile	Asp	Phe	Thr	Arg	Leu	Pro	Ser	Pro	Thr	Pro	Glu
			100					105					110		
Asn	Lys	Asp	Leu	Phe	Phe	Val	Thr	Arg	Ser	Ser	Gly	Val	Gln	Pro	Ser
		115					120					125			
Pro	Ala	Arg	Ser	Ser	Ser	Tyr	Ser	Glu	Ala	Asn	Glu	Pro	Asp	Leu	Gln
	130					135					140				
Met	Ala	Asn	Gly	Gly	Lys	Ser	Leu	Ser	Met	Val	Asp	Leu	Gln	Asp	Ala
145					150					155				160	
Arg	Thr	Leu	Asp	Gly	Glu	Ala	Gly	Ser	Pro	Ala	Gly	Pro	Asp	Val	Leu
			165					170					175		
Pro	Thr	Asp	Gly	Gln	Ala	Ala	Ala	Ala	Gln	Leu	Val	Ala	Gly	Trp	Pro
		180					185					190			
Ala	Arg	Ala	Thr	Pro	Val	Asn	Leu	Ala	Gly	Leu	Ala	Thr	Val	Arg	Arg
	195					200					205				
Ala	Gly	Gln	Thr	Pro	Thr	Thr	Pro	Gly	Thr	Ser	Glu	Gly	Ala		
	210					215					220				

<210> 2209  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

<400> 2209  
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 60  
 agagaaggcc atgagagaga tagcactggg acagatggtg tcagcagagg ggactccaga  
 120  
 ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaagggtg ggaggcttca  
 180  
 cacagcagag cctgggtctg gaggcacctt ggggatgttt ttecccatta ggcccctgag  
 240  
 ctctatggaa gcacttaact gcctgttccc cgcttattct gtgttttaaac caaggaaaca  
 300  
 acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttggtgtg ctt  
 353

<210> 2210  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 2210  
 Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro  
 1 5 10 15  
 Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys  
 20 25 30  
 Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly  
 35 40 45  
 Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys  
 50 55 60  
 Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

BNSDOCID: <WO\_\_0058473A2\_1\_>

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2213

acgcgtccga ccggcagttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt  
60  
gccggtgctt cgacacactg gggtatatcg ccctcaaagc acaggtctac gaaggttctg  
120  
acggaaggcc cggccaatcc gatcgcggcc tcggcgctgc gcatcatccg ggcgcgcgtg  
180  
tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag  
240  
atcgcccggg tggtcgacgc gatcacgtca cgggacgagg aagccgcca gcgtgcactg  
300  
ctcgaccaca atcgacgcgc gttggaa  
327

&lt;210&gt; 2214

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2214

Met	Arg	Ser	Pro	Ser	Ile	Ala	Gly	Ala	Ser	Thr	His	Trp	Val	Ile	Ser
1				5				10						15	
Pro	Ser	Lys	His	Arg	Ser	Thr	Lys	Val	Leu	Thr	Glu	Gly	Pro	Ala	Asn
			20					25					30		
Pro	Ile	Ala	Ala	Ser	Ala	Leu	Arg	Ile	Ile	Arg	Ala	Arg	Val	Ser	Gln
		35					40					45			
Leu	Trp	Gly	Thr	Ser	Leu	Leu	Arg	Asn	Gly	Arg	Ala	Glu	Gln	Ser	Val
	50					55				60					
Val	Glu	Ile	Ala	Arg	Leu	Val	Asp	Ala	Ile	Thr	Ser	Arg	Asp	Glu	Glu
65					70				75					80	
Ala	Ala	Gln	Arg	Ala	Leu	Leu	Asp	His	Asn	Arg	Ser	Ala	Leu	Glu	
				85					90					95	

&lt;210&gt; 2215

&lt;211&gt; 430

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2215

ctggggatca tgccctacat cactgcgtcg atcatcctgc agctgctgac agtcgtgatc  
60  
ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat caccagtagc  
120  
accggttacc tcaactctcg gcttggcctg ttgcaggcaa cggccttcgt cacgcttgcc  
180  
acctccggcc gtctattcac cnntgcagct ntgccagtcg tctactccac ctcggtcttc  
240  
gaagtcgtcg tcatgacccg gactatgacg gccggtagca ccatcgatcat gtggatgggt  
300  
gagctcatca ccgaccgcgg tatcggcaac ggtatgtcga tcatgatttt cactcagatt  
360

gcggcgcggtt tccctgactc gctgtggtct atcaaggctc ctcgaaatgg cgccgggtcag  
420

gctcacgcgt  
430

<210> 2216  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 2216  
Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu  
1 5 10 15  
Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser  
20 25 30  
Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu  
35 40 45  
Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg  
50 55 60  
Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe  
65 70 75 80  
Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val  
85 90 95  
Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met  
100 105 110  
Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu  
115 120 125  
Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala  
130 135 140

<210> 2217  
<211> 444  
<212> DNA  
<213> Homo sapiens

<400> 2217  
accagggccg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcgggct  
60  
atgacgtggc tcgatgacga cgtgggcgcc gacctgttga atcaggctga ttccatggac  
120  
catgccctgg aggccaccgt cccaggctcg gtcaccacgc cggacgcca agtcatccag  
180  
acctgtgccg tgttgcgtga ccttgctcgc gtggcagtca gccagctggg ccgaaatgac  
240  
gaggactcta gggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcgggag  
300  
gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggt gtgggtctct  
360  
gagtctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggcttgcta  
420  
cgagagaatg tctttgctca gtcc  
444

<210> 2218

<211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 2218  
 Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr  
 1 5 10 15  
 Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu  
 20 25 30  
 Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro  
 35 40 45  
 Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val  
 50 55 60  
 Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp  
 65 70 75 80  
 Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala  
 85 90 95  
 Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala  
 100 105 110  
 Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser  
 115 120 125  
 Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val  
 130 135 140  
 Phe Ala Gln Ser  
 145

<210> 2219  
 <211> 688  
 <212> DNA  
 <213> Homo sapiens

<400> 2219  
 acgcgtaccg tcgttggcat gagcgtcctg ccactggaaa tttggctgtc attcagctac  
 60  
 ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccggaaa ccgttgggag  
 120  
 tggtcgatecc ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt  
 180  
 ggaatgttcc atagtgtgca gattgcgcgt catgtcagca gttaccacgg catcatggtc  
 240  
 gctttcgcgc tcgttgggta cggatggctt gcgatgcaca acttgcgta ccctgatgag  
 300  
 cgctattcga ttcgctcggc cttgataatc ggcacgcgca tccagttcac ctgggaggca  
 360  
 gtgctgatga tctcgggtat caggccgttg acatggcgcc cgcttggtat cgattctctc  
 420  
 atcgagacga atctcggcgc tccgttcattg ttgctcattg tgaaagcttg gcgcgcgcca  
 480  
 cccgaaggaa ttcttggctc taccagtccg cgcccgaccg cccgtggcac agcgcgagtc  
 540  
 tatatgaggg atgatcttgt ttctcgacgc cttctacagc gtccttgaga gcctctgcga  
 600  
 gcgaagggcg cgggtgtagg tctccccggg gctcgttgtg gtcctcctc tgcgtgacgc  
 660



agagccgtgt gatgaggcga agtcatga  
688

<210> 2220  
<211> 189  
<212> PRT  
<213> Homo sapiens

<400> 2220  
Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile  
1 5 10 15  
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg  
20 25 30  
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu  
35 40 45  
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg  
50 55 60  
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly  
65 70 75 80  
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr  
85 90 95  
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp  
100 105 110  
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro  
115 120 125  
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met  
130 135 140  
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly  
145 150 155 160  
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met  
165 170 175  
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro  
180 185

<210> 2221  
<211> 530  
<212> DNA  
<213> Homo sapiens

<400> 2221  
actagtgtag ctgcaatata tactcgggat ttactacagt taagccttat ccttccaccc  
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aaagaagagc aaaccgccat cgctaacgtc ctttccgaca tggacaccga actcgacgcc  
120  
ctacaacaac gcctcagtaa aacaaaaacc atcaagcaag gcatgatgca agaactactc  
180  
acagggaaaa cgaggttggt atgagccaca aggtgaattt agtgcattgag ctggataagc  
240  
gtattatctc ggtaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc  
300  
ggccttataa atggtcacaa gagaacctaa atgcgctgat gagtgattta cgaatttatc  
360  
gtaacaaatc ggcttatcgg ctggggacgg tggtttttca ttatcataat gaaccgtag  
420

acaacgagaa taccacacaag ctggatattg tagacgggtca gcaacgtacc ttaaccttgt  
 480  
 tgctgctagt caaagccatt ttagaagaac gggtgtctgc gttaacgcgt  
 530

<210> 2222  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<400> 2222  
 Thr Ser Val Ala Ala Ile Tyr Thr Arg Asp Leu Leu Gln Leu Ser Leu  
 1 5 10 15  
 Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser  
 20 25 30  
 Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr  
 35 40 45  
 Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr  
 50 55 60  
 Arg Leu Val  
 65

<210> 2223  
 <211> 482  
 <212> DNA  
 <213> Homo sapiens

<400> 2223  
 cggccgcccgc ggtagtgagc cctgcgtcgg tggcgtaatg gaaaatgctg cgctgggttg  
 60  
 acaggcgcca gacattgttg tggacgatgc cgctgtcgat cgggtggcacg ccggtgaaga  
 120  
 tgcatttatc caacggccgg gacagggccg gcagttcaca gtccagtttg taaagcgctg  
 180  
 cgcgtcctgc gctgatatag gcctggagat gcccctatggc gtgtcgggca acctcgtagt  
 240  
 tcaggccgtc gagcaccaca aggatgacgt tgtgcttcat aaggggagac gctccgcaac  
 300  
 gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtgggcgc gggcaagccc  
 360  
 gctccacac aagcccgtgc ccacattgga tctccaatgt gggctacagc cttactgcat  
 420  
 attgatgatg acttcttcct gccacttctg cggcagtgcc ttggaggtct tttcccacgc  
 480  
 gt  
 482

<210> 2224  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2224  
 Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn

1	5	10	15
Val Ile Leu Val Val Leu Asp Gly Leu Asn Tyr Glu Val Ala Arg His			
20	25	30	
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu			
35	40	45	
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys			
50	55	60	
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn			
65	70	75	80
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr			
85	90	95	
Asp Ala Gly Leu Thr Thr Ala Ala Ala			
100	105		

&lt;210&gt; 2225

&lt;211&gt; 753

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2225

nacgcgtctg atccacacgg gccactgacg tggcggttatg acagggagcg ggccggtgcc  
 60  
 ggcgtcatcc tcgatctcat gggtcacgga gaggatctcg tccagtatct actcaaaggg  
 120  
 cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgtec caagccactc  
 180  
 aaggagggca tcggccacac aggttgggtc gtctcggacg agctcggggc ggtgggcaac  
 240  
 gaggattatt gcgctgtcat cgcccgtatg gaaaacggag tgatgtgcac cctggagtcc  
 300  
 agtcgggtca gtgttggggc gcgcgcggag tacatcgctg agatctatgg aaccgacgga  
 360  
 tcaatccggt ggaacttcga ggatctcaac catttgcagg tctgtctggg gcgaaacaat  
 420  
 cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccgga gttcatgcgt  
 480  
 ttccaaccgg gagccggaac atccatgggc tttgacgaca tgaaggctcg tgaggctgcg  
 540  
 aaattcgtcc gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatggttgg  
 600  
 gcctcagcgg aggtcaacga tgcgatcggt gcctcctgcg ggggaccatg cctggcatga  
 660  
 cgtgaagccg gtttcgggga gaaccacgtt cgataagtga ccgcgtcatc gcgtgtctgt  
 720  
 gaccaggcct ggcggcacia ccaggtcgcc ggc  
 753

&lt;210&gt; 2226

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2226

Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

1	5	10	15
Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp			
20	25	30	
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val			
35	40	45	
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile			
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Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn			
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Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys			
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Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile			
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Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp			
115	120	125	
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln			
130	135	140	
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg			
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Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val			
165	170	175	
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr			
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Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala			
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 <212> DNA  
 <213> Homo sapiens

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 gactttgtac gaacgcttcg tactcaccag gcactgtggt gtaaatacccc ggtaaagcca  
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 cgagttgcat tgtctcctgc ggggggtccag gccctgggtca agcagggcctt caatgttgct  
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 <213> Homo sapiens

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Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35           40           45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50           55           60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
      65           70           75           80
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Glu Ala

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      35           40           45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50           55           60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
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Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
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&lt;213&gt; Homo sapiens

&lt;400&gt; 2231

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&lt;210&gt; 2232

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2232

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Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val
          20          25          30
Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr
          35          40          45
His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
          50          55          60
Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg
          65          70          75          80
Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
          85          90          95
Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser
          100          105          110
Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala
          115          120          125
Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro
          130          135          140
Leu Met Pro Thr Ala Val Trp Lys Ala Gly Ser Leu Leu Arg Arg Gln

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145		150		155		160									
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Thr															

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 100 105 110  
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 130 135 140  
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 165 170 175  
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 180 185 190  
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 Asp Met Cys Leu Glu Lys Asp Thr Leu Gly Leu Phe Leu Arg Glu Gly  
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Ile	Leu	Ile	Thr	Ser	His	Gly	Glu	Leu	Gln	Tyr	Tyr	Leu	Ser	Leu	Leu				
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Gln	Val	Thr	Glu	Leu	Gly	Arg	Ile	Ala	Ser	His	Tyr	Tyr	Ile	Thr	Asn				
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Met	Arg	Ala	Ile	Phe	Glu	Ile	Val	Leu	Asn	Arg	Gly	Trp	Ala	Gln	Leu				
				660					665					670					
Thr	Asp	Lys	Thr	Leu	Asn	Leu	Cys	Lys	Met	Ile	Asp	Lys	Arg	Met	Trp				
				675					680					685					
Gln	Ser	Met	Cys	Pro	Leu	Arg	Gln	Phe	Arg	Lys	Leu	Pro	Glu	Glu	Val				
				690					695					700					
Val	Lys	Lys	Ile	Glu	Lys	Lys	Asn	Phe	Pro	Phe	Glu	Arg	Leu	Tyr	Asp				
705						710				715					720				
Leu	Asn	His	Asn	Glu	Ile	Gly	Glu	Leu	Ile	Arg	Met	Pro	Lys	Met	Gly				
				725						730				735					
Lys	Thr	Ile	His	Lys	Tyr	Val	His	Leu	Phe	Pro	Lys	Leu	Glu	Leu	Ser				
				740					745					750					
Val	His	Leu	Gln	Pro	Ile	Thr	Arg	Ser	Thr	Leu	Lys	Val	Glu	Leu	Thr				
				755					760					765					
Ile	Thr	Pro	Asp	Phe	Gln	Trp	Asp	Glu	Lys	Val	His	Gly	Ser	Ser	Glu				

770 775 780  
Ala Phe Trp Ile Leu Val Glu Asp Val Asp Ser Glu Val Ile Leu His  
785 790 795 800  
His Glu Tyr Phe Leu Leu Lys Ala Lys Tyr Ala Gln Asp Glu His Leu  
805 810 815  
Ile Thr Phe Phe Val Pro Val Phe Glu Pro Leu Pro Pro Gln Tyr Phe  
820 825 830  
Ile Arg Val Val Ser Asp Arg Trp Leu Ser Cys Glu Thr Gln Leu Pro  
835 840 845  
Val Ser Phe Arg His Leu Ile Leu Pro Glu Lys Tyr Pro Pro Pro Thr  
850 855 860  
Glu Leu Leu Asp Leu Gln Pro Leu Pro Val Ser Ala Leu Arg Asn Ser  
865 870 875 880  
Ala Phe Glu Ser Leu Tyr Gln Asp Lys Phe Pro Phe Phe Asn Pro Ile  
885 890 895  
Gln Thr Gln Val Phe Asn Thr Val Tyr Asn Ser Asp Asp Asn Val Phe  
900 905 910  
Val Gly Ala Pro Thr Gly Ser Gly Lys Thr Ile Cys Ala Glu Phe Ala  
915 920 925  
Ile Leu Arg Met Leu Leu Gln Ser Ser Glu Gly Arg Cys Val Tyr Ile  
930 935 940  
Thr Pro Met Glu Ala Leu Ala Glu Gln Val Tyr Met Asp Trp Tyr Glu  
945 950 955 960  
Lys Phe Gln Asp Arg Leu Asn Lys Lys Val Val Leu Leu Thr Gly Glu  
965 970 975  
Thr Ser Thr Asp Leu Lys Leu Leu Gly Lys Gly Asn Ile Ile Ile Ser  
980 985 990  
Thr Pro Glu Lys Trp Asp Ile Leu Ser Arg Arg Trp Lys Gln Arg Lys  
995 1000 1005  
Asn Val Gln Asn Ile Asn Leu Phe Val Val Asp Glu Val His Leu Ile  
1010 1015 1020  
Gly Gly Glu Asn Gly Pro Val Leu Glu Val Ile Cys Ser Arg Met Arg  
1025 1030 1035 1040  
Tyr Ile Ser Ser Gln Ile Glu Arg Pro Ile Arg Ile Val Ala Leu Ser  
1045 1050 1055  
Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser  
1060 1065 1070  
Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu  
1075 1080 1085  
Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu  
1090 1095 1100  
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro  
1105 1110 1115 1120  
Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu  
1125 1130 1135  
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln  
1140 1145 1150  
Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys  
1155 1160 1165  
Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr  
1170 1175 1180  
Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu  
1185 1190 1195 1200  
Phe Ser Ser Gly Ala Ile Gln Val Val Val Ala Ser Arg Ser Leu Cys

				1205					1210					1215	
Trp	Gly	Met	Asn	Val	Ala	Ala	His	Leu	Val	Ile	Ile	Met	Asp	Thr	Gln
				1220					1225					1230	
Tyr	Tyr	Asn	Gly	Lys	Ile	His	Ala	Tyr	Val	Asp	Tyr	Pro	Ile	Tyr	Asp
				1235					1240					1245	
Val	Leu	Gln	Met	Val	Gly	His	Ala	Asn	Arg	Pro	Leu	Gln	Asp	Asp	Glu
				1250					1255					1260	
Gly	Arg	Cys	Val	Ile	Met	Cys	Gln	Gly	Ser	Lys	Lys	Asp	Phe	Phe	Lys
1265							1270					1275			1280
Lys	Phe	Leu	Tyr	Glu	Pro	Leu	Pro	Val	Glu	Ser	His	Leu	Asp	His	Cys
				1285					1290					1295	
Met	His	Asp	His	Phe	Asn	Ala	Glu	Ile	Val	Thr	Lys	Thr	Ile	Glu	Asn
				1300					1305					1310	
Lys	Gln	Asp	Ala	Val	Asp	Tyr	Leu	Thr	Trp	Thr	Phe	Leu	Tyr	Arg	Arg
				1315					1320					1325	
Met	Thr	Gln	Asn	Pro	Asn	Tyr	Tyr	Asn	Leu	Gln	Gly	Ile	Ser	His	Arg
1330							1335					1340			
His	Leu	Ser	Asp	His	Leu	Ser	Glu	Leu	Val	Glu	Gln	Thr	Leu	Ser	Asp
1345							1350					1355			1360
Leu	Glu	Gln	Ser	Lys	Cys	Ile	Ser	Ile	Glu	Asp	Glu	Met	Asp	Val	Ala
				1365					1370					1375	
Pro	Leu	Asn	Leu	Gly	Met	Ile	Ala	Ala	Tyr	Tyr	Tyr	Ile	Asn	Tyr	Thr
				1380					1385					1390	
Thr	Ile	Glu	Leu	Phe	Ser	Met	Ser	Leu	Asn	Ala	Lys	Thr	Lys	Val	Arg
				1395					1400					1405	
Gly	Leu	Ile	Glu	Ile	Ile	Ser	Asn	Ala	Ala	Glu	Tyr	Glu	Asn	Ile	Pro
1410							1415					1420			
Ile	Arg	His	His	Glu	Asp	Asn	Leu	Leu	Arg	Gln	Leu	Ala	Gln	Lys	Val
1425							1430					1435			1440
Pro	His	Lys	Leu	Asn	Asn	Pro	Lys	Phe	Asn	Asp	Pro	His	Val	Lys	Thr
				1445					1450					1455	
Asn	Leu	Leu	Leu	Gln	Ala	His	Leu	Ser	Arg	Met	Gln	Leu	Ser	Ala	Glu
				1460					1465					1470	
Leu	Gln	Ser	Asp	Thr	Glu	Glu	Ile	Leu	Ser	Lys	Ala	Ile	Arg	Leu	Ile
				1475					1480					1485	
Gln	Ala	Cys	Val	Asp	Val	Leu	Ser	Ser	Asn	Gly	Trp	Leu	Ser	Pro	Ala
1490							1495					1500			
Leu	Ala	Ala	Met	Glu	Leu	Ala	Gln	Met	Val	Thr	Gln	Ala	Met	Trp	Ser
1505							1510					1515			1520
Lys	Asp	Ser	Tyr	Leu	Lys	Gln	Leu	Pro	His	Phe	Thr	Ser	Glu	His	Ile
				1525					1530					1535	
Lys	Arg	Cys	Thr	Asp	Lys	Gly	Val	Glu	Ser	Val	Phe	Asp	Ile	Met	Glu
				1540					1545					1550	
Met	Glu	Asp	Glu	Glu	Arg	Asn	Ala	Leu	Leu	Gln	Leu	Thr	Asp	Ser	Gln
				1555					1560					1565	
Ile	Ala	Asp	Val	Ala	Arg	Phe	Cys	Asn	Arg	Tyr	Pro	Asn	Ile	Glu	Leu
1570							1575					1580			
Ser	Tyr	Glu	Val	Val	Asp	Lys	Asp	Ser	Ile	Arg	Ser	Gly	Gly	Pro	Val
1585							1590					1595			1600
Val	Val	Leu	Val	Gln	Leu	Glu	Arg	Glu	Glu	Glu	Val	Thr	Gly	Pro	Val
				1605					1610					1615	
Ile	Ala	Pro	Leu	Phe	Pro	Gln	Lys	Arg	Glu	Glu	Gly	Trp	Trp	Val	Val
				1620					1625					1630	
Ile	Gly	Asp	Ala	Lys	Ser	Asn	Ser	Leu	Ile	Ser	Ile	Lys	Arg	Leu	Thr

1635                      1640                      1645  
 Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr  
 1650                      1655                      1660  
 Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly  
 1665                      1670                      1675                      1680  
 Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr  
 1685                      1690                      1695  
 Asp Ser Asp Ser Asp  
 1700

<210> 2235  
 <211> 586  
 <212> DNA  
 <213> Homo sapiens

<400> 2235  
 tctagaatga gtatgaggac actctcacca gagtgaggtg aaggtgtata cagctggcac  
 60  
 tcagtgcttg cacattctcc actggcagaa tgactcccga cgtggctcgg gctccccgga  
 120  
 agacaccct cgaagcagtg gtgcctctag catcttcgac ctgaggaacc tggcagctga  
 180  
 ctcattgttg ccctctctgc tagagcgggc ggccccagaa gatgtggacc ggcgcaatga  
 240  
 agcccttcga cggcagcacc ggcccccggc cctgcttccc ctctaccgg cacctgacga  
 300  
 ggatgaagcc ggggaacgct gtagccgct agagccaccc ccgagagcac tttggacaaa  
 360  
 ggatcttggt caagtgtctg tcgctcaagt tcgagattga aattgagccc atctttggga  
 420  
 tcttggtct gtatgatgtg cggaagaaaa agaagatctc ggaaaacttc tacttcgacc  
 480  
 tgaactcgga ctccatgaag gggctgcttc gggctcatgg caccaccct gccatctcca  
 540  
 ccctggcccc ctctgccatc ttctctgtga cctaccctc acgcgt  
 586

<210> 2236  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 2236  
 Met Ser Pro Lys Gln Pro Leu His Gly Val Arg Val Gln Val Glu Val  
 1                      5                      10                      15  
 Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln  
 20                      25                      30  
 Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr  
 35                      40                      45  
 Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly  
 50                      55                      60  
 Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly  
 65                      70                      75                      80  
 Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala



	85		90		95										
Gly	Pro	His	Leu	Leu	Gly	Pro	Pro	Ala	Leu	Ala	Glu	Arg	Ala	Thr	Met
	100				105								110		
Ser	Gln	Leu	Pro	Gly	Ser	Ser	Gly	Arg	Arg	Cys					
	115				120										

&lt;210&gt; 2237

&lt;211&gt; 421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2237

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cctaggaagg cacacctgtg tcccactgca gccaaagagga agcaccctct
60
tggggcgcag gaggctggc cagcttgggg atagtccttg gaagtggctg ggagcactga
120
gggaggagct gaggtccaag cctcctcca gtgcatcacc ctggtcagga gtggggcagt
180
gtggagccag gggctcttca gccagcacct gctgcactat gggctccagc tgtgcaagac
240
caccctgag aaggagtctt gttgggagca ggggtgggaa gcactgtggg agaggtgtcc
300
ttggctcggg tagcaggac cttgatgtat cttgaagcca gggggccgac tgaggcgctt
360
gtctgaaggc ctccatgaga gggagggggc tggagggggc tgttcccaat aatagctcta
420
t
421

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&lt;210&gt; 2238

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2238

Met	Glu	Ala	Phe	Arg	Gln	Ala	Pro	Gln	Ser	Ala	Pro	Trp	Leu	Gln	Asp
1				5				10						15	
Thr	Ser	Arg	Ser	Leu	Leu	Pro	Glu	Pro	Arg	Thr	Pro	Leu	Pro	Gln	Cys
			20					25					30		
Phe	Pro	Thr	Leu	Leu	Pro	Thr	Arg	Leu	Leu	Leu	Thr	Gly	Gly	Leu	Ala
		35					40					45			
Gln	Leu	Glu	Pro	Ile	Val	Gln	Gln	Val	Leu	Ala	Glu	Glu	Pro	Leu	Ala
	50					55					60				
Pro	His	Cys	Pro	Thr	Pro	Asp	Gln	Gly	Asp	Ala	Leu	Glu	Glu	Gly	Leu
65					70				75					80	
Asp	Leu	Ser	Ser	Ser	Leu	Ser	Ala	Pro	Asp	His	Phe	Gln	Gly	Leu	Ser
			85					90					95		
Pro	Ser	Trp	Pro	Ala	Leu	Leu	Arg	Pro	Lys	Arg	Ser	Val	Trp	Gly	Ala
			100					105					110		
Ser	Ser	Trp	Leu	Gln	Trp	Asp	Thr	Gly	Val	Pro	Ser				
			115				120								

&lt;210&gt; 2239

&lt;211&gt; 623



<212> DNA  
 <213> Homo sapiens

<400> 2239  
 gctagcagga ctcagaaatc tgctgttgag cacaaagcca aaaaatctct gtcccatcct  
 60  
 agccattcca ggcctgggcc catggtcacc ccacacaata aggctaagag tccaggtgtc  
 120  
 aggcagccag gcagcagctc tagctcagcc cctgggcagc ccagcacagg ggttgctcga  
 180  
 cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctcaggacct  
 240  
 gagcgatcaa tcagtgggtc caagaagcca accaatgact caaatccctc taggcggaca  
 300  
 gtcagtggta catgtggccc tggacaacct gcaagcagct caggtggccc tgggcgaccc  
 360  
 atcagtgggt cagttagttc tgcaagaccc ttgggcagct ctcgtggccc tggccggcct  
 420  
 gtgagcagtc cacatgaact tcgacgacca gtgagtggct tgggcccccc ggggcggtct  
 480  
 gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggacggac tgtcagtaat  
 540  
 tcagtcccag gaagaccagt gagcagcttg ggacctgggc aaacagttag tagctcaggt  
 600  
 ccactataa agcctaagtg cac  
 623

<210> 2240  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<400> 2240  
 Ala Ser Arg Thr Gln Lys Ser Ala Val Glu His Lys Ala Lys Lys Ser  
 1 5 10 15  
 Leu Ser His Pro Ser His Ser Arg Pro Gly Pro Met Val Thr Pro His  
 20 25 30  
 Asn Lys Ala Lys Ser Pro Gly Val Arg Gln Pro Gly Ser Ser Ser Ser  
 35 40 45  
 Ser Ala Pro Gly Gln Pro Ser Thr Gly Val Ala Arg Pro Thr Val Ser  
 50 55 60  
 Ser Gly Pro Val Pro Arg Arg Gln Asn Gly Ser Ser Ser Ser Gly Pro  
 65 70 75 80  
 Glu Arg Ser Ile Ser Gly Ser Lys Lys Pro Thr Asn Asp Ser Asn Pro  
 85 90 95  
 Ser Arg Arg Thr Val Ser Gly Thr Cys Gly Pro Gly Gln Pro Ala Ser  
 100 105 110  
 Ser Ser Gly Gly Pro Gly Arg Pro Ile Ser Gly Ser Val Ser Ser Ala  
 115 120 125  
 Arg Pro Leu Gly Ser Ser Arg Gly Pro Gly Arg Pro Val Ser Ser Pro  
 130 135 140  
 His Glu Leu Arg Arg Pro Val Ser Gly Leu Gly Pro Pro Gly Arg Ser  
 145 150 155 160  
 Val Ser Gly Pro Gly Arg Ser Ile Ser Gly Pro Ile Pro Ala Gly Arg

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<210> 2241
<211> 656
<212> DNA
<213> Homo sapiens
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<210> 2242
<211> 218
<212> PRT
<213> Homo sapiens
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1650

```

      100      105      110
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
      115      120      125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
      130      135      140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
145      150      155      160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
      165      170      175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
      180      185      190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
      195      200      205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
      210      215

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&lt;210&gt; 2243

&lt;211&gt; 384

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2243

```

gaattcagca tttaaagtgc actcggtggc atgcaatttg ctgtcatgaa aacgactgtg
60
gattcatttc ctggtaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
120
aaaaaaccaa atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaataaa
180
tccttaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtcctggctg
240
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
300
ggttctgcct cctccttgcc cactctcttt gcgccctccc tgtgctcgcc tgtcttgttt
360
tacctcccat cctgggccct tgga
384

```

&lt;210&gt; 2244

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2244

```

Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
1      5      10      15
Trp Ala Arg Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
      20      25      30
His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
      35      40      45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
      50      55      60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
65      70      75      80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

```

85                      90                      95  
 Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser  
 100                      105

<210> 2245  
 <211> 632  
 <212> DNA  
 <213> Homo sapiens

<400> 2245  
 acgcgtgcga ttaccgtcaa ggctgggtgtg gtgagcgtg atctgcacga gcggacgtct  
 60  
 tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgctatt  
 120  
 gagggccaca agcatttcac gtggcgtcat ggcgaggctg acgcggtggg catggtgttt  
 180  
 gcggccgaac tgtcgcaccg gtacctggga ctgtccgatg aggtcgttgc gcgcaccgcg  
 240  
 actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg  
 300  
 cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg  
 360  
 ttgcggtttg tcggtattca caaaccgggt caggtcgcca tgatcgtcga ccctgacgag  
 420  
 gccgctttag ccgagtgcta cgaccggtgt tccgcacggt aaaaacgttc ggaaatgaac  
 480  
 atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgaccc caagtgatgt  
 540  
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccataccgga  
 600  
 cttaagttca gtatcgacgg catgaatccg ga  
 632

<210> 2246  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 2246  
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His  
 1                      5                      10                      15  
 Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr  
 20                      25                      30  
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp  
 35                      40                      45  
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu  
 50                      55                      60  
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg  
 65                      70                      75                      80  
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys  
 85                      90                      95  
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val  
 100                      105                      110  
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

115 120 125  
 Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala  
 130 135 140  
 Glu Cys Tyr Asp Arg Cys Ser Ala Arg  
 145 150

<210> 2247  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

<400> 2247  
 gggcggttcgc ctccaggggtt ctccccgaca ctggatgcca acctgcccag gggcagaagg  
 60  
 gaggttgggc gtgggggagtg ccgggtacag tcagagttgc caggacagtt tggagcagtg  
 120  
 cctcttaatc ttggccgcac agcacctggg agctttaaat agacccccac gccctgggcg  
 180  
 cccccaccgc tgaccacccc gatctcagct ctgcctttcc cgcctctctg ctggggttgca  
 240  
 taagccagcg attcccaacc ccggctgtac ctggaagcta cccaggagc ttctggagaa  
 300  
 tgtgccgtgt gagccatccc cctg  
 324

<210> 2248  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2248  
 Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg  
 1 5 10 15  
 Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly  
 20 25 30  
 Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln  
 35 40 45  
 Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu  
 50 55 60  
 Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His  
 65 70 75 80  
 Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser  
 85 90 95  
 Val Gly Glu Asn Pro Gly Gly Glu Arg  
 100 105

<210> 2249  
 <211> 394  
 <212> DNA  
 <213> Homo sapiens

<400> 2249  
 gaaaaccgga taacaggggtg tatacaagcc tctgagttct gggagcaaca accagctcaa  
 60

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cggggttttc ccattcccac  
 120  
 ggtggaaacc gcggccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa  
 180  
 aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcgggt tagcacctc  
 240  
 ccggcttttc tcccgaccgc gtgcaggggtg ggctgcgctg ggctggggag gaactgggag  
 300  
 ctgggggctc atgtcctgta taaaggggct gcagggggcg tgtctcccc cagaagactg  
 360  
 gccacatggg gacaggcctc ctggggggcag atct  
 394

<210> 2250  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 2250  
 Met Ser Pro Gln Leu Pro Val Pro Pro Arg Pro Ser Ala Ala His Pro  
 1 5 10 15  
 Ala Arg Gly Arg Glu Lys Ser Arg Glu Gly Ala Lys Pro Asn Ser Cys  
 20 25 30  
 Lys Phe His His Thr Gly Gly Arg Leu Thr Leu Pro Phe Lys Gly Pro  
 35 40 45  
 Phe Arg Leu Lys Glu Ala Asp Phe Asn Ser Leu Ala Ala Val Ser Thr  
 50 55 60  
 Val Gly Met Gly Lys Pro Arg Gly Ser Gln Leu Asn Cys Phe Leu Thr  
 65 70 75 80  
 Phe Pro Cys Gly Leu Ser Trp Leu Leu Leu Pro Glu Leu Arg Gly Leu  
 85 90 95  
 Tyr Thr Pro Cys Tyr Pro Val Phe  
 100

<210> 2251  
 <211> 654  
 <212> DNA  
 <213> Homo sapiens

<400> 2251  
 acgcgtactt attcgccacc atgattatga ccagtgtttc cagtcggttc agttgttgca  
 60  
 gtggaatagt cagggttaaatt ttaatgtgac cgtttatcgc aatctgccga ccaactcgca  
 120  
 ttcaatcatg acttcgtgat aaaagattga gtgtgagggtt ataacgccga agcggtaaaa  
 180  
 attttaattt ttgccgctga ggggttgacc aagcgaagcg cggtagggtt tctgcttagg  
 240  
 agtttaataca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag  
 300  
 ctggtttctca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct  
 360  
 acatcgtcaa cgttatatatt tgatagtttg acgggttaatg ctggtaatgg tggttttctt  
 420

cattgcattc agatggatac atctgtcaac gccgctaac aggttggttc tgttggtgct  
 480  
 gatattgctt ttgatgccga ccctaaattt ttgacctgtt tggttcgctt tgagtcttct  
 540  
 tgggtccga ctaccctccc gactgcctat gatgtttatc ctttggtatgg tcgccatgat  
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 654

<210> 2252  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 2252  
 Met Phe Gln Thr Phe Ile Ser Arg His Asn Ser Asn Phe Phe Ser Asp  
 1 5 10 15  
 Lys Leu Val Leu Thr Ser Val Thr Pro Ala Ser Ser Ala Pro Val Leu  
 20 25 30  
 Gln Thr Pro Lys Ala Thr Ser Ser Thr Leu Tyr Phe Asp Ser Leu Thr  
 35 40 45  
 Val Asn Ala Gly Asn Gly Gly Phe Leu His Cys Ile Gln Met Asp Thr  
 50 55 60  
 Ser Val Asn Ala Ala Asn Gln Val Val Ser Val Gly Ala Asp Ile Ala  
 65 70 75 80  
 Phe Asp Ala Asp Pro Lys Phe Phe Ala Cys Leu Val Arg Phe Glu Ser  
 85 90 95  
 Ser Ser Val Pro Thr Thr Leu Pro Thr Ala Tyr Asp Val Tyr Pro Leu  
 100 105 110  
 Asp Gly Arg His Asp Gly Gly Tyr Tyr Thr Val Lys Asp Cys Val Thr  
 115 120 125  
 Ile Asp Val Leu Pro Arg Thr  
 130 135

<210> 2253  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 2253  
 ggatcctgct gggcctcttt tacgtgatgt tgaccagcc gctggtgcgc attattcgcg  
 60  
 cactgagcac cagcaagcag gcccgcttgg attgcccacc gggtcacgaa aacgatgaaa  
 120  
 tcggcgtatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc  
 180  
 agcgccgcca cgccgaggac cgcctcaccg aatacctggg ccaactggaa gatatcgctt  
 240  
 ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc  
 300  
 tggaagcggc aaagttgacc gccttgg  
 327

<210> 2254

<211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2254  
 Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser  
   1                  5                  10                  15  
 Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile  
           20                  25                  30  
 Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr  
           35                  40                  45  
 Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu  
       50                  55                  60  
 Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala  
 65                  70                  75                  80  
 Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys  
           85                  90                  95  
 Leu Thr Ala Leu  
           100

<210> 2255  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 2255  
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 aatatggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct  
 120  
 cctgtacagg gcagtgcagc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat  
 180  
 actcgtctta aggagcttgg ttggacgcta ctcttgacagg tgcattgatga agtgatactg  
 240  
 gaagggcctt cagagtctgc ggagtnggcc aagtcacatag ttgttgagtg catgtctaag  
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 cccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgccaa gtgtgca  
 357

<210> 2256  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 2256  
 Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser  
   1                  5                  10                  15  
 Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His  
           20                  25                  30  
 Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp  
           35                  40                  45  
 Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys  
       50                  55                  60  
 Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu



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<210> 2257
<211> 626
<212> DNA
<213> Homo sapiens
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<210> 2258
<211> 187
<212> PRT
<213> Homo sapiens
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1657

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			100					105					110						
Gln	Ile	Pro	Arg	Lys	Glu	Asn	Glu	Glu	His	Asp	Arg	Pro	Ala	Asp	Lys				
			115				120					125							
Thr	Ala	Asn	Glu	Lys	Asn	Lys	Val	Lys	Asn	Gln	Ile	Tyr	Pro	Glu	Ala				
			130			135					140								
Asp	Phe	Ala	Asp	Ser	Met	Glu	Pro	Ser	Glu	Ile	Ala	Ser	Glu	Asp	Cys				
145					150				155					160					
Glu	Leu	Ser	His	Ser	Val	Tyr	Glu	Asn	Phe	Met	Leu	Leu	Ile	Glu	Gln				
			165					170						175					
Leu	Arg	Met	Glu	Tyr	Lys	Gly	Arg	Thr	Thr	Ala									
			180					185											

&lt;210&gt; 2259

&lt;211&gt; 425

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2259

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60  
taaaggtaaa cacttacgtg taacacgttc atcaaagaat tcaggaacca catattctgg  
120  
acggtcattc acgactgtaa cacgacagcc aataaacaat agcaaatacag taatagctcg  
180  
gctaacatga cctgcaccta atacgagaac tgacggatca ttttctacag gttgtacgaa  
240  
acactccatt tcgcctacca tgcatagaga attcagcttt gctttatcta cagtaaattcc  
300  
ttcaatagga gttccgtata gaacccttcc atcttcagca taaatagtct tatccccttg  
360  
acgaggaccg gatagaacgg taaccattac ggtagcttca gtaacctgta gacgattttt  
420  
catga  
425

&lt;210&gt; 2260

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2260

Met	Lys	Asn	Arg	Leu	Gln	Val	Thr	Glu	Ala	Thr	Val	Met	Val	Thr	Val				
1				5				10					15						
Leu	Ser	Gly	Pro	Arg	Gln	Gly	Asp	Lys	Thr	Ile	Tyr	Ala	Glu	Asp	Gly				
			20				25					30							
Arg	Val	Leu	Tyr	Gly	Thr	Pro	Ile	Glu	Gly	Phe	Thr	Val	Asp	Lys	Ala				
		35				40				45									
Lys	Leu	Asn	Ser	Leu	Cys	Met	Val	Gly	Glu	Met	Glu	Cys	Phe	Val	Gln				
	50				55				60										
Pro	Val	Glu	Asn	Asp	Pro	Ser	Val	Leu	Val	Leu	Gly	Ala	Gly	His	Val				
65				70				75					80						
Ser	Arg	Ala	Ile	Thr	Asp	Leu	Leu	Leu	Phe	Ile	Gly	Cys	Arg	Val	Thr				

				85					90					95				
Val	Val	Asp	Asp	Arg	Pro	Glu	Tyr	Val	Val	Pro	Glu	Phe	Phe	Asp	Glu			
			100						105					110				
Arg	Val	Thr	Arg	Lys	Cys	Leu	Pro	Leu	Glu	Asn	Phe	Lys	Asn	Asp	Leu			
		115					120					125						
Pro	Leu	Asp	Glu	Tyr	Asn	Gly	Phe	Ile	Ile	Val	Thr	Arg						
		130				135						140						

<210> 2261  
 <211> 660  
 <212> DNA  
 <213> Homo sapiens

<400> 2261  
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 60  
 ttgagcccaa gcgcgaggtc gatgtgtccg gcgaccgcgc gcgttgcggt gggagcatag  
 120  
 tgtcggtgca cgctgaccga gaggtccgtg cggagagtag tcccgatgat atttgcgggc  
 180  
 agctcgatgc cgtggccgcc atgatggccc ttgtctatgg gtcgaatgtg actattcccg  
 240  
 acgatgccgg gaggtctctc gacaagcttc actgaacggg gttcaattgg tcccaacggc  
 300  
 tgcccatgtg ggcagccgct ctatctcgtc atgggaagga acccgatgtc gtcacgcaat  
 360  
 gggttccagg ccaccgacct ggctcttata gcggtctttg cagccctcat tgctgtgcta  
 420  
 gccgtcatcc cgccgatgtt catgggtgggg gcggtccctt ttgcccttca gatggttgcc  
 480  
 gtcattgctg cgccgatggg gctgggaagt atccgtggcg gatgcgcggg aggcttgtat  
 540  
 atccttgctg gcgcgctggg gctgcccgtc ttcagcgggt ggtctagcgg gattggcgtc  
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 660

<210> 2262  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

Met	Pro	Gly	Gly	Ser	Ser	Thr	Ser	Phe	Thr	Glu	Arg	Cys	Ser	Ile	Gly			
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Pro	Asn	Gly	Cys	Pro	Cys	Gly	Gln	Pro	Leu	Tyr	Leu	Val	Met	Gly	Arg			
			20					25					30					
Asn	Pro	Met	Ser	Ser	Arg	Asn	Gly	Phe	Gln	Ala	Thr	Asp	Leu	Ala	Leu			
		35					40					45						
Ile	Ala	Val	Phe	Ala	Ala	Leu	Ile	Ala	Val	Leu	Ala	Val	Ile	Pro	Pro			
	50					55				60								
Met	Phe	Met	Val	Gly	Ala	Val	Pro	Phe	Ala	Leu	Gln	Met	Val	Ala	Val			
65					70				75					80				
Met	Leu	Ala	Pro	Met	Val	Leu	Gly	Ser	Ile	Arg	Gly	Gly	Cys	Ala	Val			

				85					90					95				
Gly	Leu	Tyr	Ile	Leu	Val	Gly	Ala	Leu	Gly	Leu	Pro	Val	Phe	Ser	Gly			
			100						105					110				
Gly	Ser	Ser	Gly	Ile	Gly	Val	Leu	Val	Gly	Pro	Thr	Gly	Gly	Tyr	Leu			
		115					120						125					
Trp	Gly	Trp	Leu	Ile	Gly	Ala	Phe	Val	Ala	Gly								
	130						135											

&lt;210&gt; 2263

&lt;211&gt; 491

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2263

nacgcgttcc cggtcgaccg aggcaaaggc aaaagtaagc aggggtgccc tagtccccgt  
 60  
 tcccaccgcg gtatggctgg gtcactgctg acagatggcg tccccctgct gatctttccg  
 120  
 gagggcaccc ggtctcgcac cggcgcaatg ggcaccttca aacctggggc tgccgcattg  
 180  
 gctatttcac gtgggggttcc gggtatcccc attgcttttag taggagcatg ggcggctatg  
 240  
 ccgtccgagc aagccagggt accaaaagga cgtccattgg tccacgtggc tattggacac  
 300  
 cctatggacc ctgttcccgg cgagatcgcc caccaattct ccgaacggat tcgtcgccag  
 360  
 gtcattgagt tgcacgacca aaccgcccgc gcctacggca tgccaaccct tgacgaatac  
 420  
 ggacgccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcac caccaaccac  
 480  
 tcgacgtgca c  
 491

&lt;210&gt; 2264

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2264

Xaa	Ala	Phe	Pro	Val	Asp	Arg	Gly	Lys	Gly	Lys	Ser	Lys	Gln	Gly	Ala			
1				5					10					15				
Arg	Ser	Pro	Arg	Ser	His	Arg	Gly	Met	Ala	Gly	Ser	Leu	Leu	Thr	Asp			
			20					25					30					
Gly	Val	Pro	Leu	Leu	Ile	Phe	Pro	Glu	Gly	Thr	Arg	Ser	Arg	Thr	Gly			
		35					40					45						
Ala	Met	Gly	Thr	Phe	Lys	Pro	Gly	Ala	Ala	Ala	Leu	Ala	Ile	Ser	Arg			
	50					55					60							
Gly	Val	Pro	Val	Ile	Pro	Ile	Ala	Leu	Val	Gly	Ala	Trp	Ala	Ala	Met			
65				70						75					80			
Pro	Ser	Glu	Gln	Ala	Arg	Leu	Pro	Lys	Gly	Arg	Pro	Leu	Val	His	Val			
			85					90					95					
Ala	Ile	Gly	His	Pro	Met	Asp	Pro	Val	Pro	Gly	Glu	Ile	Ala	His	Gln			
		100						105					110					
Phe	Ser	Glu	Arg	Ile	Arg	Arg	Gln	Val	Ile	Glu	Leu	His	Asp	Gln	Thr			

115 120 125  
 Ala Arg Ala Tyr Gly Met Pro Thr Leu Asp Glu Tyr Gly Arg His Arg  
 130 135 140  
 Ala Leu Ser Gln Ala Ser Glu Ser Gly Asp Thr Ala Ser Thr Asn His  
 145 150 155 160  
 Ser Thr Cys

<210> 2265  
 <211> 328  
 <212> DNA  
 <213> Homo sapiens

<400> 2265  
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 gtcaacacgg cagacacatg ctggcagaaa ccctgctgga gttgcccctg agcattgatg  
 120  
 cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac  
 180  
 cggaagggtc cggaaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata  
 240  
 tcactcactt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc  
 300  
 ttttagcacgt gactgggacc actggaca  
 328

<210> 2266  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2266  
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 1 5 10 15  
 Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu  
 20 25 30  
 Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly  
 35 40 45  
 Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly  
 50 55 60  
 Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile  
 65 70 75 80  
 Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu  
 85 90 95  
 Thr Pro Asn Leu  
 100

<210> 2267  
 <211> 370  
 <212> DNA  
 <213> Homo sapiens

<400> 2267

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 agaccatgga gggctaatagc aggctgggaa ggctaggcag agttcccaga aacaggtcac  
 120  
 cgagggagcc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac  
 180  
 agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg  
 240  
 gacagagatg gtgaagcagg catgtcctaa agcctccctt cttaaccctg accttgaagg  
 300  
 acaggaaaca agtcatttac gtatgttgta ggcctagagc aagggattgc agagatgggc  
 360  
 gtcaacgcgt  
 370

<210> 2268  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 2268  
 Met Ala Asp His Gly Gly Leu Met Gln Ala Gly Lys Ala Arg Gln Ser  
 1 5 10 15  
 Ser Gln Lys Gln Val Thr Glu Gly Ala Thr Thr Glu Leu His Ser Arg  
 20 25 30  
 Trp Gly Val Lys Pro Tyr Pro Pro Lys Thr Ala Val Thr Gly Val Ala  
 35 40 45  
 Asn Leu Tyr Arg Asp Arg Leu Lys Ala Thr Ala Thr Gln Gly Thr Glu  
 50 55 60  
 Met Val Lys Gln Ala Cys Pro Lys Ala Ser Leu Leu Asn Pro Asp Leu  
 65 70 75 80  
 Glu Gly Gln Glu Thr Ser His Leu Arg Met Leu  
 85 90

<210> 2269  
 <211> 507  
 <212> DNA  
 <213> Homo sapiens

<400> 2269  
 ctctccgacc gcgtcaaccc cggcaatata cgcaagttcg acgaccagat cgaatcgatt  
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 tgtaaggctg ccaccgagca cggtacgagc atccgaatcg gcgtgaatgc tgggtctctc  
 120  
 gacaaacgtc tgcttgacaa atacggagcc ccgaccgccg aggctatggt ggagtcggca  
 180  
 ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctcggtgaag  
 240  
 caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgccgcaa atgcgattat  
 300  
 ccccttcatt tgggcgttac tgaggctggt ccggccttcc aaggcaccat caagtcggcg  
 360  
 gtggccttcg ggcattctct tgccgagggt atcggcgata ccatacgcgt ctccttgctc  
 420

gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt  
 480  
 cctcgaggtc tagagatcgt ctccctgc  
 507

<210> 2270  
 <211> 169  
 <212> PRT  
 <213> Homo sapiens

<400> 2270  
 Leu Ser Asp Arg Val Asn Pro Gly Asn Ile Arg Lys Phe Asp Asp Gln  
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 Ile Glu Ser Ile Cys Lys Ala Ala Thr Glu His Gly Thr Ser Ile Arg  
 20 25 30  
 Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr  
 35 40 45  
 Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala  
 50 55 60  
 Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys  
 65 70 75 80  
 His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala  
 85 90 95  
 Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala  
 100 105 110  
 Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala  
 115 120 125  
 Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val  
 130 135 140  
 Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg  
 145 150 155 160  
 Pro Arg Gly Leu Glu Ile Val Ser Cys  
 165

<210> 2271  
 <211> 573  
 <212> DNA  
 <213> Homo sapiens

<400> 2271  
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 ccgatggtcg acgaaagcct ggaacagttc gccagttgc tcaaaaccg cacctcggaa  
 120  
 gaaggcatgg cgccgttgac ctccgacgcg gtggcgcggt tggccactta cagcgcacgg  
 180  
 ctggcggacc accaaggggcg tgtgtccgcg cgcattggcg acttgttcca actggtcagc  
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 gaggcggact ttatccgcca cctggcgggc gacgagatga ctgatgccgg ccatatcgaa  
 300  
 cgggcgctca aggccaaggc cagcggtacc gggcgtgtat cggcgcggtat tctcgacgac  
 360  
 atgctcgctg gggtcattcct gatcgacacc gccggtgcgg ccgtgggcaa atgcaacggg  
 420

ctgacggtgc tggaagtcgg cgattcggcg ttcggcgtgc cggcgcggtat ttccgccacg  
480  
gtgtaccgcg gcggcagcgg cattgtcgac atcgagcgcg aagttaacct cggccagccg  
540  
atccactcca agggcgtgat gaccttacc ggt  
573

<210> 2272  
<211> 191  
<212> PRT  
<213> Homo sapiens

<400> 2272  
Xaa Ala Asp Pro Asp Phe Gln Glu Met Leu Arg Ala Leu Val Asp Phe  
1 5 10 15  
Asp Glu Asp Ile Pro Met Val Asp Glu Ser Leu Glu Gln Phe Ala Gln  
20 25 30  
Leu Leu Lys Thr Arg Thr Ser Glu Gly Met Ala Pro Leu Thr Ser  
35 40 45  
Asp Ala Val Ala Arg Leu Ala Thr Tyr Ser Ala Arg Leu Ala Asp His  
50 55 60  
Gln Gly Arg Val Ser Ala Arg Ile Gly Asp Leu Phe Gln Leu Val Ser  
65 70 75 80  
Glu Ala Asp Phe Ile Arg His Leu Ala Gly Asp Glu Met Thr Asp Ala  
85 90 95  
Gly His Ile Glu Arg Ala Leu Lys Ala Lys Ala Thr Arg Thr Gly Arg  
100 105 110  
Val Ser Ala Arg Ile Leu Asp Asp Met Leu Ala Gly Val Ile Leu Ile  
115 120 125  
Asp Thr Ala Gly Ala Ala Val Gly Lys Cys Asn Gly Leu Thr Val Leu  
130 135 140  
Glu Val Gly Asp Ser Ala Phe Gly Val Pro Ala Arg Ile Ser Ala Thr  
145 150 155 160  
Val Tyr Pro Gly Gly Ser Gly Ile Val Asp Ile Glu Arg Glu Val Asn  
165 170 175  
Leu Gly Gln Pro Ile His Ser Lys Gly Val Met Ile Leu Thr Gly  
180 185 190

<210> 2273  
<211> 4355  
<212> DNA  
<213> Homo sapiens

<400> 2273  
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120  
gagagggagg aggaagtgat cacctgtttt gagagggcct cctggatcgc tcaggtgttc  
180  
ctgcaggaat tggagaagac cacaaataac agcacgtcga ggcattctgaa aggctgtcac  
240  
ccgcttgact atgagctcac ctacttcctg gaagctgcc tccagagcgc ctatgtgaaa  
300



aacctgaaga aggggaacat cgtgaagggc atgagagagc tccgggaggt gctgcggact  
360  
gtggagacca aagcaactca gaacttcaaa gtgatggcgg ccaagcacct ggcggggggc  
420  
ctgctgcact cctgagtgg agtgctactg gagccccctg tcccaccctc tgccctgagtt  
480  
atgggcaagg aggagagtgc tttcgccact caggccctgc ggaaacctca cctctatgaa  
540  
ggagacaacc tctactgccc caaggacaac atcgaggaag cctcctgct cctcctcatc  
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agcgaatcca tggcaactcg agatgtggtg ctgagccggg tgccggagca ggaggaggac  
660  
cggacagtga gcttgagaa tgccgcagcc atctatgacc tctgagcat cacgttgggc  
720  
agaaggggac agtacgtcat gctctcggag tgccctggagc gagccatgaa gtttgcggtt  
780  
ggagaatttc acctttggta ccagggtggc ctctccatgg tggcttgtgg gaagtcagcc  
840  
tacgtgtgt cctgctgcg ggagtgtgtg aagttgcggc cctcggaccc caccgtgccc  
900  
ctgatggccg cgaaggtctg catcggtgcc ctctcgtggc tagaggaagc agagcacttt  
960  
gccatgatgg tgatcagcct cggagaggaa gccggggagt tctccccc aa gggctacctg  
1020  
gctctgggtc tcacctatag cctgcaggcc accgacgcca cctgaagtc caagcaagat  
1080  
gaattgcacc ggaaggcact gcagacgctg gagagggtc agcagctggc gccagtgac  
1140  
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<211> 158

<212> PRT

<213> Homo sapiens

<400> 2274

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150

155

&lt;210&gt; 2275

&lt;211&gt; 608

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2275

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&lt;210&gt; 2276

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2276

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Asp	Val	Ile	Glu	Glu	Leu	Ala	Gln	Ala	Ser	Thr	Gln	Thr	Leu	Lys	Ser
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Ser	Ser	Ser	Ala	Thr	Leu	Ile	Pro	Val	Pro	Ile	Ser	Pro	Pro	Phe	Thr

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&lt;211&gt; 640

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2277

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&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2278

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35	45
Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val	
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&lt;211&gt; 6505

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2285

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&lt;210&gt; 2286

&lt;211&gt; 1784

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2286

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Pro	Gly	Pro	Ala	Pro	Gly	Arg	Ala	Thr	Glu	Gly	Arg	Ala	Ala	Leu	Asp
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Ile	Val	His	Pro	Val	Arg	Val	Asp	Ala	Gly	Gly	Ser	Phe	Leu	Ser	Tyr
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Glu	Leu	Trp	Pro	Arg	Ala	Leu	Arg	Lys	Arg	Asp	Val	Ser	Val	Arg	Arg
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Asp	Ala	Pro	Ala	Phe	Tyr	Glu	Leu	Gln	Tyr	Arg	Gly	Arg	Glu	Leu	Arg
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Phe	Asn	Leu	Thr	Ala	Asn	Gln	His	Leu	Leu	Ala	Pro	Gly	Phe	Val	Ser
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Glu	Thr	Arg	Arg	Arg	Gly	Gly	Leu	Gly	Arg	Ala	His	Ile	Arg	Ala	His
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Thr	Pro	Ala	Cys	His	Leu	Leu	Gly	Glu	Val	Gln	Asp	Pro	Glu	Leu	Glu
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Gly	Gly	Leu	Ala	Ala	Ile	Ser	Ala	Cys	Asp	Gly	Leu	Lys	Gly	Val	Phe
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Gln	Leu	Ser	Asn	Glu	Asp	Tyr	Phe	Ile	Glu	Pro	Leu	Asp	Ser	Ala	Pro
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Ala	Arg	Pro	Gly	His	Ala	Gln	Pro	His	Val	Val	Tyr	Lys	Arg	Gln	Ala
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Pro	Glu	Arg	Leu	Ala	Gln	Arg	Gly	Asp	Ser	Ser	Ala	Pro	Ser	Thr	Cys

1677

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Glu Tyr Phe Ala Lys Lys Leu Arg Asp Ala Val Val Asp Gly Thr Pro  
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Cys Tyr Gln Val Arg Ala Ser Arg Asp Leu Cys Ile Asn Gly Ile Cys  
660 665 670  
Lys Asn Val Gly Cys Asp Phe Glu Ile Asp Ser Gly Ala Met Glu Asp  
675 680 685  
Arg Cys Gly Val Cys His Gly Asn Gly Ser Thr Cys His Thr Val Ser  
690 695 700  
Gly Thr Phe Xaa Arg Arg Pro Arg Val Xaa Gly Tyr Val Asp Val Gly  
705 710 715 720  
Leu Ile Pro Ala Gly Ala Arg Glu Ile Arg Ile Gln Glu Val Ala Glu  
725 730 735  
Ala Ala Asn Phe Leu Ala Leu Arg Ser Glu Asp Pro Glu Lys Tyr Phe  
740 745 750  
Leu Asn Gly Gly Trp Thr Ile Gln Trp Asn Gly Asp Tyr Gln Val Ala  
755 760 765  
Gly Thr Thr Phe Thr Tyr Ala Arg Arg Gly Asn Trp Glu Asn Leu Thr  
770 775 780  
Ser Pro Gly Pro Thr Lys Glu Pro Val Trp Ile Gln Val Pro Ala Ser  
785 790 795 800  
Arg Gly Pro Gly Gly Gly Ser Arg Gly Gly Val Pro Arg Pro Ser Thr  
805 810 815  
Leu His Gly Arg Ser Arg Pro Gly Gly Val Ser Pro Gly Ser Val Thr  
820 825 830  
Glu Pro Gly Ser Glu Pro Gly Pro Pro Ala Ala Ala Ser Thr Ser Val  
835 840 845  
Ser Pro Ser Leu Lys Trp Pro Asn Leu Val Ala Ala Val His Arg Gly  
850 855 860  
Gly Trp Gly Gln Ala Pro Leu Gly Leu Gly Gly Trp Arg Arg His Leu  
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Val Leu Met Gly Pro Arg Leu Pro Thr Gln Leu Leu Phe Gln Glu Ser  
885 890 895  
Asn Pro Gly Val His Tyr Glu Tyr Thr Ile His Arg Glu Ala Gly Gly  
900 905 910  
His Asp Glu Val Pro Pro Pro Val Phe Ser Trp His Tyr Gly Pro Trp  
915 920 925  
Thr Lys Cys Thr Val Thr Cys Gly Arg Gly Val Gln Arg Gln Asn Val  
930 935 940  
Tyr Cys Leu Glu Arg Gln Ala Gly Pro Val Asp Glu Glu His Cys Asp  
945 950 955 960  
Pro Leu Gly Arg Pro Asp Asp Gln Gln Arg Lys Cys Ser Glu Gln Pro  
965 970 975  
Cys Pro Ala Arg Trp Trp Ala Gly Glu Trp Gln Leu Cys Ser Ser Ser  
980 985 990  
Cys Gly Pro Gly Gly Leu Ser Arg Arg Ala Val Leu Cys Ile Arg Ser  
995 1000 1005  
Val Gly Leu Asp Glu Gln Ser Ala Leu Glu Pro Pro Ala Cys Glu His  
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Gly Ser Gly Ser Ser Ser His Glu Leu Phe Asn Glu Ala Asp Phe Ile		
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Pro His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser Pro Lys Pro		
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Gly Thr Met Gly Asn Ala Ile Glu Glu Glu Ala Pro Glu Leu Asp Leu		
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Pro Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile		
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Asp Leu Ala Gly Thr Gly Asp Arg Thr Pro Pro Pro His Ser His Pro		
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Ala Ala Pro Ser Thr Gly Ser Pro Val Pro Ala Thr Glu Pro Pro Ala		
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Ala Lys Glu Glu Gly Val Leu Gly Pro Trp Ser Pro Ser Pro Trp Pro		
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Ser Gln Ala Gly Arg Ser Pro Pro Pro Ser Glu Gln Thr Pro Gly		
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Pro Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp		
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Gly Lys Asp Ser Gln Ser Gln Leu Pro Pro Pro Trp Arg Asp Arg Thr		
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Gly Leu Gly His Met Pro Glu Pro Ala Leu Asn Pro Gly Pro Lys Gly		
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Gln Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu		
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Ser Thr Pro Ala Trp Asp Ser Pro Ala Asn Ser His Arg Val Pro Glu		
1475	1480	1485
Thr Gln Pro Leu Ala Pro Ser Leu Ala Glu Ala Gly Pro Pro Ala Asp		



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 <212> DNA  
 <213> Homo sapiens

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 <211> 142  
 <212> PRT  
 <213> Homo sapiens

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 Ile Phe Leu Tyr Gly Pro Cys Ser Ser Gln Pro Leu Ile Leu Glu Leu  
 35 40 45  
 Gly Thr Gly Ser Ala Thr Ser Met Leu Leu Ser Cys Cys Ser Pro Ala  
 50 55 60  
 Trp Asn Val Pro Tyr Leu Ala Asn Ser Tyr Cys Ser Ser Val Thr Leu  
 65 70 75 80  
 Leu Asp Thr Phe Leu Pro Leu Ser Leu Val Arg Cys Ser Pro Leu Gly  
 85 90 95  
 Ser His Gly Pro Leu Cys Val Pro Val Val Ala Gln Gln Lys Pro Pro  
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 Ala Asp Gly Trp Val Ser Cys Pro Glu His Gly Ser Leu Arg Ala Glu  
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 Ser Thr Trp Leu Ser Gly Gly Ala Gln Ser His Trp Leu His  
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<210> 2289  
 <211> 381  
 <212> DNA  
 <213> Homo sapiens

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<210> 2290  
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 <212> PRT  
 <213> Homo sapiens

<400> 2290  
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 Ile Asp Tyr Thr Gly Gly Leu Lys His Gln Ile Leu Gln Ser His Gly  
 35 40 45  
 Gln Asp Ala Glu Leu Ser Gly Thr Leu Ser Leu Val Leu Thr Gln Gly  
 50 55 60  
 Cys Lys Arg Ile Xaa Arg Gly Tyr Trp Phe Lys Asn Trp Pro Pro Thr  
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 Thr Lys Thr Ser Thr Ala Val Phe Leu Gly Leu Glu Lys Pro Leu Met  
 85 90 95  
 Arg Ile His Phe  
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<210> 2291  
 <211> 573  
 <212> DNA  
 <213> Homo sapiens

<400> 2291  
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573

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<211> 140  
<212> PRT  
<213> Homo sapiens

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Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu  
35 40 45  
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile  
50 55 60  
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val  
65 70 75 80  
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala  
85 90 95  
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val  
100 105 110  
Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser  
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Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp  
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<210> 2293  
<211> 358  
<212> DNA  
<213> Homo sapiens

<400> 2293  
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240  
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358

<210> 2294  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 2294  
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Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp			
35	40	45	
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp			
50	55	60	
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro			
65	70	75	80
Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp			
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Ser Asp Ser Leu Ala Gly Ala Asp Arg Asp Ala Arg Gly Ala Ser Asp			
100	105	110	
Ala Cys Leu			
115			

<210> 2295  
 <211> 546  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 240  
 gcggagcgc tcaaacatta tcgcgttaaa aacgtggtac ttgatacggg gatgctggcg  
 300  
 aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg  
 360  
 ccacacgtcg cgctgatcac gccaaatttg ccggaggcgg cggcgtgct ggatgcgcct  
 420  
 catgcccgtg ccgagcacga gatgaaagag caggggcgcg cacttctggc gcttggctgc  
 480  
 gaggcagtgc tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc  
 540  
 acgcgt  
 546

<210> 2296  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

1	5	10	15
Gly Thr Asp Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp Leu Xaa Thr			
20	25	30	
Phe Ser Ala Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala Leu Val			
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu Pro Asp			

```

      35          40          45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
      50          55          60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
      65          70          75          80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
      85          90          95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
      100          105          110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
      115          120          125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
      130          135          140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
      145          150          155          160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
      165          170          175
Asp Trp Leu Phe Thr Arg
      180

```

&lt;210&gt; 2297

&lt;211&gt; 414

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2297

```

gggaattccg ggcccttccc cccaagcccg ggtaattttt tgtattttta aaaaaaaagg
60
gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac ccccccccc
120
caccccccca aaggccgaaa agcagggcca aaaccccccg gacccccccc ggggggggca
180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgagggtct ctggttaata
240
aatgttgaga ttaggggtta ggtgagatta aacagggttct ttttttcattg atttctcgga
300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtataca aaacactggg
360
gatctgaccc acatgtaaag tctgatttct ttgggtctggg gcaggcctga aatn
414

```

&lt;210&gt; 2298

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2298

```

Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
1      5      10      15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
20     25     30
Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
35     40     45
Phe Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

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50	55	60
Val Glu Met		
65		
<210> 2299		
<211> 987		
<212> DNA		
<213> Homo sapiens		
<400> 2299		
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ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg taccctgcga ctcgtgacca		
120		
acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac		
180		
agtttggata tgactgaggc tctccaatgg gccagatata actggcgacg gctgatcaga		
240		
ggtgcaacca gggatgatga ttcagggcca tacaactatt cctcgttgct cgctgtggg		
300		
cgcaagtcct ctcagatccc taaactgtca ggaaggcacc ggattgttgt tccccacata		
360		
cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga		
420		
acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga		
480		
gctgccaat tatatttcct gtccctagtt gtcctgaact gggtagcctt ggtagaagcc		
540		
ttccaaaagg aaatcaccat gttgcctctg gtgggtggcc ttacaattat cgcaattaaa		
600		
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa tttaataact		
660		
aaagtttata gtaggaaaga gaaaaaatac attgaccgat gctggaaaga cgttactgtt		
720		
ggggacttta ttcgcctctc ctgcaacgag gtcacccctg cagacatggt actactcttt		
780		
tccactgata cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat		
840		
ttaaaacaga ggcagggtgt tcggggatat gcagaacagg actctgaagt tgatcctgag		
900		
aagttttcca gtaggataga atgtgaaagc ccaaacaatg acctcagcag attccgaggg		
960		
ttcctagaac attccaacaa agaacgc		
987		
<210> 2300		
<211> 266		
<212> PRT		
<213> Homo sapiens		
<400> 2300		
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile		
1	5	10
Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser		15

	20		25		30										
Leu	Leu	Ala	Cys	Gly	Arg	Lys	Ser	Ser	Gln	Ile	Pro	Lys	Leu	Ser	Gly
	35						40					45			
Arg	His	Arg	Ile	Val	Val	Pro	His	Ile	Gln	Pro	Phe	Lys	Asp	Glu	Tyr
	50					55					60				
Glu	Lys	Phe	Ser	Gly	Ala	Tyr	Val	Asn	Asn	Arg	Ile	Arg	Thr	Thr	Lys
65				70				75							80
Tyr	Thr	Leu	Leu	Asn	Phe	Val	Pro	Arg	Asn	Leu	Phe	Glu	Gln	Phe	His
			85					90						95	
Arg	Ala	Ala	Asn	Leu	Tyr	Phe	Leu	Phe	Leu	Val	Val	Leu	Asn	Trp	Val
			100					105						110	
Pro	Leu	Val	Glu	Ala	Phe	Gln	Lys	Glu	Ile	Thr	Met	Leu	Pro	Leu	Val
		115					120					125			
Val	Val	Leu	Thr	Ile	Ile	Ala	Ile	Lys	Asp	Gly	Leu	Glu	Asp	Tyr	Arg
	130					135					140				
Lys	Tyr	Lys	Ile	Asp	Lys	Gln	Ile	Asn	Asn	Leu	Ile	Thr	Lys	Val	Tyr
145				150						155					160
Ser	Arg	Lys	Glu	Lys	Lys	Tyr	Ile	Asp	Arg	Cys	Trp	Lys	Asp	Val	Thr
			165					170						175	
Val	Gly	Asp	Phe	Ile	Arg	Leu	Ser	Cys	Asn	Glu	Val	Ile	Pro	Ala	Asp
		180						185						190	
Met	Val	Leu	Leu	Phe	Ser	Thr	Asp	Pro	Asp	Gly	Ile	Cys	His	Ile	Glu
	195						200					205			
Thr	Ser	Gly	Leu	Asp	Gly	Glu	Ser	Asn	Leu	Lys	Gln	Arg	Gln	Val	Val
	210					215					220				
Arg	Gly	Tyr	Ala	Glu	Gln	Asp	Ser	Glu	Val	Asp	Pro	Glu	Lys	Phe	Ser
225				230						235					240
Ser	Arg	Ile	Glu	Cys	Glu	Ser	Pro	Asn	Asn	Asp	Leu	Ser	Arg	Phe	Arg
			245					250						255	
Gly	Phe	Leu	Glu	His	Ser	Asn	Lys	Glu	Arg						
		260						265							

&lt;210&gt; 2301

&lt;211&gt; 390

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2301

tatcccaagc gcttcaaatt tgatgccgat gagttctact tgaaatcgtc cgaggaaatg

60

nncgccacct ctccgcgna tttccctgaa gcctgcgata acactatgga aatcgctgag

120

nncgttgcca cgttgaattc aacacaaacg caanactaca tgcccgatatt cccacccccg

180

gagggggaga atgaggaatc ctgggttcgtc aaagaagttg aacgcggttt gcactaccga

240

ttccccgagg gcattcccga tgacgtacgc aagcaggcag attatgaagt agggattatt

300

acccagatgg gattccccgg ctacttcttg gtggtcgcgg attttatcaa ctgggcgaag

360

aataacggaa ttcgagtggg ccccgggcgt

390

&lt;210&gt; 2302

<211> 130  
<212> PRT  
<213> Homo sapiens

<400> 2302  
Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser  
1 5 10 15  
Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys  
20 25 30  
Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr  
35 40 45  
Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn  
50 55 60  
Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg  
65 70 75 80  
Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu  
85 90 95  
Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val  
100 105 110  
Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro  
115 120 125  
Gly Arg  
130

<210> 2303  
<211> 638  
<212> DNA  
<213> Homo sapiens

<400> 2303  
nnggatccag gctgcccctg tgtgtctcct tcagtcttcg ttagctgcct gctgctgtct  
60  
gcacctgtgt ttggctacct gggcgaccga catagccgca aggctaccat gagcttcggt  
120  
atcttgctgt ggtcaggagc tggcctctct agctccttca tctccccccg gtattcttgg  
180  
ctcttcttcc tgtcccgggg catcgagggc actggctcgg ccagctactc caccatcgcg  
240  
cccaccgtcc tgggcgacct ctctgtgagg gaccagcgca cccgcgtgct ggctgtcttc  
300  
tacatcttta tccccgttgg aagtggctctg ggctacgtgc tggggtcggc tgtgacgatg  
360  
ctgactggga actggcgctg ggccctccga gtcatgccct gcctggaggc cgtggccttg  
420  
atcctgctta tcctgctggt tccagacca ccccggggag ctgccgagac acagggggag  
480  
ggggccgtgg gaggcttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac  
540  
tgaggttttg tgtggtcgac cctcggagtg accgccatgg cctttgtgac tggagccctg  
600  
gggttctggg cccccaagtt tctgctcgag gcacgcgt  
638

<210> 2304



<211> 212  
 <212> PRT  
 <213> Homo sapiens

<400> 2304

Xaa	Asp	Pro	Gly	Cys	Pro	Cys	Val	Ser	Pro	Ser	Val	Phe	Val	Ser	Cys
1				5				10						15	
Leu	Leu	Leu	Ser	Ala	Pro	Val	Phe	Gly	Tyr	Leu	Gly	Asp	Arg	His	Ser
			20					25					30		
Arg	Lys	Ala	Thr	Met	Ser	Phe	Gly	Ile	Leu	Leu	Trp	Ser	Gly	Ala	Gly
		35					40					45			
Leu	Ser	Ser	Ser	Phe	Ile	Ser	Pro	Arg	Tyr	Ser	Trp	Leu	Phe	Phe	Leu
	50					55					60				
Ser	Arg	Gly	Ile	Glu	Gly	Thr	Gly	Ser	Ala	Ser	Tyr	Ser	Thr	Ile	Ala
65					70					75					80
Pro	Thr	Val	Leu	Gly	Asp	Leu	Phe	Val	Arg	Asp	Gln	Arg	Thr	Arg	Val
				85					90					95	
Leu	Ala	Val	Phe	Tyr	Ile	Phe	Ile	Pro	Val	Gly	Ser	Gly	Leu	Gly	Tyr
			100					105					110		
Val	Leu	Gly	Ser	Ala	Val	Thr	Met	Leu	Thr	Gly	Asn	Trp	Arg	Trp	Ala
		115					120					125			
Leu	Arg	Val	Met	Pro	Cys	Leu	Glu	Ala	Val	Ala	Leu	Ile	Leu	Leu	Ile
	130					135					140				
Leu	Leu	Val	Pro	Asp	Pro	Pro	Arg	Gly	Ala	Ala	Glu	Thr	Gln	Gly	Glu
145					150					155					160
Gly	Ala	Val	Gly	Gly	Phe	Arg	Ser	Ser	Trp	Cys	Glu	Asp	Val	Arg	Tyr
			165						170					175	
Leu	Gly	Lys	Asn	Trp	Ser	Phe	Val	Trp	Ser	Thr	Leu	Gly	Val	Thr	Ala
			180					185					190		
Met	Ala	Phe	Val	Thr	Gly	Ala	Leu	Gly	Phe	Trp	Ala	Pro	Lys	Phe	Leu
		195					200					205			
Leu	Glu	Ala	Arg												
		210													

<210> 2305  
 <211> 340  
 <212> DNA  
 <213> Homo sapiens

<400> 2305

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tcggaccagc acactttgac cgctcgtggtc gcctcgtgac atggggtaac gcgaacctcg
120
tcgctcctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg
180
cccgcaacgc tattggtgac gcagcactcg cagctgggtct cgaccgactc gtccacacca
240
cggcgtcggc gcgcgacgag ggcgatgagt tggtcgtcgt tactcgcagc gctgctgccg
300
ccgcacgcaa ttccatgacg acaacgtgga gttggcgcgc
340

```

<210> 2306

```

<400> 2308
Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro
  1          5          10          15
Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys
      20          25          30
Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser
      35          40          45
Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu
  50          55          60
Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro

```

```

65          70          75          80
Pro Pro Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu
          85          90          95
Pro Glu Pro Pro Asp Thr Tyr Glu Glu Asp Gly Asp Glu Ser Gly Asn
          100          105          110
Gly Leu Pro Lys Thr Lys Glu Ala
          115          120

```

<210> 2309  
 <211> 395  
 <212> DNA  
 <213> Homo sapiens

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<400> 2309
ggatccctac aaatggggcc ctgctctgag cacattccca tgagggctgc ctgccctgtg
60
cactctctgc cctgggccgc ggggcctgac tgggttccca cctcctccta cccactgggg
120
tcttttccag caggcacagg gattcctcat gggggaggca gagcccaccc gtctgtcctc
180
ggtgacggcc tgagctgtgc acggcctccc ctgccctcct gttctcaggc cccccagggt
240
ccatccagcc ccagcgtgtg gcgttctggc tcttccttgg agtctcctcc cagaccacgc
300
gactccactc aactgtgcc tagcggactg tgtggttgat gcagccggct cacttgagtg
360
tgttgtgtta tgcccacaac aggcttgccg tcacc
395

```

<210> 2310  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2310
Met Gly Pro Cys Ser Glu His Ile Pro Met Arg Ala Ala Cys Pro Val
1          5          10          15
His Ser Leu Pro Trp Ala Ala Gly Pro Asp Trp Val Pro Thr Ser Ser
20          25          30
Tyr Pro Leu Gly Ser Phe Pro Ala Gly Thr Gly Ile Pro His Gly Gly
35          40          45
Gly Arg Ala His Pro Ser Val Leu Gly Asp Gly Leu Ser Cys Ala Arg
50          55          60
Pro Pro Leu Pro Ser Cys Ser Gln Ala Pro Gln Gly Pro Ser Ser Pro
65          70          75          80
Ser Val Trp Arg Ser Gly Ser Ser Leu Glu Ser Pro Pro Arg Pro Arg
85          90          95
Asp Ser Thr His Thr Val Pro Ser Gly Leu Cys Gly
100          105

```

<210> 2311  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 2311  
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 ggctttctcag tgatcaaggt cggcgatggc atcaatgatt gcgacgctct cgccgcggcg  
 120  
 gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc  
 180  
 gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg  
 240  
 gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcgggtgtt ccttgtaacg  
 300  
 accgtcgtcg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag  
 360  
 cttgtgacca tgaacgcg  
 378

<210> 2312  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 2312  
 Val His Ala Glu Met Leu Pro Gln Asp Lys Gln Arg Val Val Gly Glu  
 1 5 10 15  
 Leu Lys Arg Gln Gly Phe Ser Val Ile Lys Val Gly Asp Gly Ile Asn  
 20 25 30  
 Asp Cys Asp Ala Leu Ala Ala Asp Val Gly Ser Pro Met Gly Gly  
 35 40 45  
 Ser Ala Asp Val Ala Leu Glu Thr Ala Asp Ala Ala Val Leu His Gly  
 50 55 60  
 Arg Val Gly Asp Val Phe Ala Met Ile Ala Leu Ser Lys Arg Thr Met  
 65 70 75 80  
 Ala Asn Ile Arg Gln Asn Ile Ala Ile Ala Ile Gly Leu Lys Ala Val  
 85 90 95  
 Phe Leu Val Thr Thr Val Val Gly Ile Thr Gly Leu Trp Pro Ala Ile  
 100 105 110  
 Leu Ala Asp Thr Gly Thr Thr Glu Leu Val Thr Met Asn Ala  
 115 120 125

<210> 2313  
 <211> 669  
 <212> DNA  
 <213> Homo sapiens

<400> 2313  
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 60  
 atccgaatca tggctcgtcc tggttggcct ggaaccatta acgtacgcct caccatcgc  
 120  
 ttaagcgacg ccggtctagc tgtcgaagtc accgcgcgca atgtcggtag gacagcgggg  
 180  
 ccgcttgat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca  
 240

gtcgacgccc cgtttacctc gtgggttacag gtcgatgac ggctgctacc aatgcagatg  
300  
cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat  
360  
accgcttaca ccgtgaaagg aggacggaac cgtcggatcg cccgcatggc gstatccgggt  
420  
ctcaacggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc  
480  
tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca  
540  
tttaatgagg gcccgaccca cggtgacgtc attcgactgg agcccggtaa tgacgtcaca  
600  
ctgcactggg gcatcgcta acccgcgga gctcgaaagg acaaggacgg gaaggcagga  
660  
ttcacgcgt  
669

<210> 2314  
<211> 206  
<212> PRT  
<213> Homo sapiens

<400> 2314  
Leu Val Ala Trp Ser Arg Trp Ser Leu Val Glu His Thr Asp Thr Ser  
1 5 10 15  
Val Thr Gln Thr Ile Arg Ile Met Ala Arg Pro Gly Trp Pro Gly Thr  
20 25 30  
Ile Asn Val Arg Leu Thr His Arg Leu Ser Asp Ala Gly Leu Ala Val  
35 40 45  
Glu Val Thr Ala Arg Asn Val Gly Thr Thr Ala Gly Pro Leu Gly Tyr  
50 55 60  
Ala Ala His Pro Tyr Leu Cys Leu Gly Gly Thr Ile Asp Asp Trp Thr  
65 70 75 80  
Val Asp Ala Pro Phe Thr Ser Trp Leu Gln Val Asp Asp Arg Leu Leu  
85 90 95  
Pro Met Gln Met Arg Glu Met Asp Ser Ile His Ala Leu Asn Gly Leu  
100 105 110  
Thr Gly Gly Gln Arg Thr Phe Asp Thr Ala Tyr Thr Val Lys Gly Gly  
115 120 125  
Arg Asn Arg Arg Ile Ala Arg Met Ala Tyr Pro Gly Leu Asn Gly Glu  
130 135 140  
Thr Ser His Glu Leu Trp Gly Asp Ala Ala Met Ser Trp Val Gln Val  
145 150 155 160  
Tyr Thr Pro Asp Asp Arg His Ser Leu Ala Ile Glu Pro Met Thr Cys  
165 170 175  
Gly Pro Asp Ala Phe Asn Glu Gly Pro Thr His Gly Asp Val Ile Arg  
180 185 190  
Leu Glu Pro Gly Asn Asp Val Thr Leu His Trp Gly Ile Ala  
195 200 205

<210> 2315  
<211> 546  
<212> DNA  
<213> Homo sapiens

<400> 2315  
 nacgcgtccc tcacgatac cgagcccggg atgggaaaac ggggtgtatcg cgttgaggcc  
 60  
 acccaaggcc gaccaattcg catcgataag gcggtcgctt atcacacttc tcgcggcgtg  
 120  
 ccggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg  
 180  
 cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat  
 240  
 gttgaggtcg agggtgcccc gaccgggtatt cagcaggctg tcagggtggaa ccttttccag  
 300  
 attgctcagg catcagcccc tgcagatcaa cttggcattc cggcaaaggg tgtaaccggg  
 360  
 tcaggctatg aaggccacta cttttgggac actgagggtt atgtcatccc gatgttgacc  
 420  
 tacactcatc caagaatcgc tgagaatgcg ctgagattcc ggggtgaatac ccttccgcaa  
 480  
 gctcgacgcc gggctaagga attgtctgaa cgaggcgccc ttttcccgtg gcgaacaatc  
 540  
 accggt  
 546

<210> 2316  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

<400> 2316  
 Xaa Ala Ser Leu Ile Asp Thr Glu Pro Gly Met Gly Lys Arg Val Tyr  
 1 5 10 15  
 Arg Val Glu Ala Thr Gln Gly Arg Pro Ile Arg Ile Asp Lys Ala Val  
 20 25 30  
 Ala Tyr His Thr Ser Arg Gly Val Pro Val His Glu Leu Phe Asp Arg  
 35 40 45  
 Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr  
 50 55 60  
 Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp  
 65 70 75 80  
 Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp  
 85 90 95  
 Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly  
 100 105 110  
 Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe  
 115 120 125  
 Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro  
 130 135 140  
 Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln  
 145 150 155 160  
 Ala Arg Arg Arg Ala Lys Glu Leu Ser Glu Arg Gly Ala Leu Phe Pro  
 165 170 175  
 Trp Arg Thr Ile Thr Gly  
 180

<210> 2317  
<211> 496  
<212> DNA  
<213> Homo sapiens

<400> 2317  
gccggcgggc tcgggaacgg tcactgacct gcagcaggca atggcggtcg cggtttaatc  
60  
agggttctgc acggagtttt ggatagtccg tccagtcgcc actggcaagg cgcgaccagg  
120  
cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcattctgcc  
180  
gggtcagttc gatcagcgcg gtcgttcgag cgcttctga acgcagcccc tgctggcgca  
240  
gacgtcggct gagtgggcct ggtgtgagat gcaaccccg attcctgcca ggaaagagcc  
300  
atccctcggg tcggtgtctc gatgtgtcag cgagctcggc gatcgattc ccgaggacct  
360  
cgggcagttc gattggctcg gctccgatgg tgagcttccc cggtcgtgat gtcacgtcga  
420  
cctgctcacg ggtgagcgcg acgatgagag tgaggtggag gccgtagagg agcacgagca  
480  
acccagcggc acgcgt  
496

<210> 2318  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2318  
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20 25 30  
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35 40 45  
Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala  
50 55 60  
Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser  
65 70 75 80  
Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser  
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Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro  
100 105

<210> 2319  
<211> 1748  
<212> DNA  
<213> Homo sapiens

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120  
tttatagtga aaccagctaa tgggtgcaatg ggtcatggga tttctttgat aagaaatgg  
180  
gacaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta  
240  
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300  
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360  
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420  
aatgagcatt ttgaacggga tgaaactgag aacaaaggca gcaaacttc catcaaagg  
480  
tttacagaat tccttcaagc aaatcaacat gatgttgcta agttttggag tgatatttca  
540  
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660  
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720  
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780  
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840  
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900  
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960  
gtacgaaagc agatctcacg agaagaacat gaaaatcgac atatggggaa ttatagacga  
1020  
atttatectc ctgaagataa agcattactt gaaaagtatg aaaatttggt agctgttgcc  
1080  
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1200  
aagttgatgg gaaaaactac caagactcga ggaccaaagc ctctgtgttc tatgcctgag  
1260  
agtactgaga taatgaaaag accaaagtac tgcagcagtg acagcagtta tgatagtagc  
1320  
agcagctctt cagaatctga cgaaaatgaa aaagaagagt accaaaataa gaaaagagaa  
1380  
aagcaagtta catataatct taaacctcc aaccactaca aattaattca acaaccagc  
1440  
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1500  
gacacccgcc cattttctgc tcaacaaatg atatctgtgt cacggccaac ttctgcatct  
1560  
cggtcacatt ccttaaaccg gggccttcct cctacatgag gcctctgcct cacagtaatg  
1620  
atgcctgctc taccaactct caagtgagtg agtctttgcg gcaactgaaa acaaaagaac  
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1740

caggaaag

1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

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Ile	Phe	Pro	Ala	Glu	Tyr	Thr	Gln	Phe	Gln	Asn	Tyr	Val	Lys	Glu	Leu
			20					25					30		
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
		35					40					45			
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50					55				60					
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65				70					75						80
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
				85				90					95		
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100						105					110		
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
	115					120						125			
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130				135					140					
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145					150					155					160
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
				165				170						175	
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
		180						185					190		
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
	195					200						205			
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210					215					220				
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225				230						235					240
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
			245					250						255	
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
		260						265					270		
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
	275					280						285			
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290					295					300				
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305				310						315					320
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
			325					330						335	
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

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          340          345          350
Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
          355          360          365
Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
          370          375          380
Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
385          390          395          400
Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
          405          410          415
Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
          420          425          430
Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Ser Glu Ser Asp Glu
          435          440          445
Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
          450          455          460
Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
465          470          475          480
Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
          485          490          495
Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
          500          505          510
Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
          515          520          525
Leu Pro Pro Thr
          530

```

&lt;210&gt; 2321

&lt;211&gt; 433

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2321

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cgttctagaa atacagccac ataatttttt ttgttttgaa aaactgctca gcaaattgcat
120
acaggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa
180
agtccaggac accatcacag agcagtactt cccttgtgag atactctcag ctaagtaaga
240
attgagttag acaacaataa aacaaatacc cataggcttt tcaaacagta acaaccgct
300
cagggttagc agcatttcta gaccttgatg gtaaaatgat gttctcaacc ttgctttca
360
gacactggat cactgcttaa gtagccttta tcttttcccc ctaatttttg ttgaagatgc
420
cagaggtgga gtg
433

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&lt;210&gt; 2322

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2322

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Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
 1           5           10           15
Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
      20           25           30
Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
      35           40           45
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
      50           55           60
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
65           70           75           80
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
      85           90           95
Thr His Ile Asp Thr Ser Thr Gln Leu
      100           105

```

&lt;210&gt; 2323

&lt;211&gt; 532

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2323

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acgcgtcaaa actggcaaag ctggcggctt agggggaggg gcaagtggac ttggaggccc
60
tcctccactg tgcaccccct tggaaaaaaa gcggaggggg catcaagtaa aagtttcttg
120
ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggtagcttct
180
ctgccgggca cagcgtcttc caggagccag ccggggagag ctgagccaag gccgaaggag
240
ccgcctgcgg gcttagccgc cccctcccgc ccgttggccc cagagcggac gctgggacgc
300
ccgggggtctg gcagctctgc gcccggttag gagcgggagg gcgagcatta gcctgcgtcc
360
tggagaaggg gcgcagcgcc gcagttgagg ccgaagcagc ccctcgcggg cgtaggatac
420
ctgtcagtga gcgcccggat tgcacggccc ccgggtagtg cctgccggcg aggggcggga
480
gctcgggtga cttggccatc cccatccccg gcccaggccc ggagggcggc cg
532

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&lt;210&gt; 2324

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2324

```

Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1           5           10           15
Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
      20           25           30
Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
      35           40           45
Pro Arg Thr

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50

&lt;210&gt; 2325

&lt;211&gt; 459

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2325

nnacgcgtgc aggaccgcat gagcgccatc tgggagagag gagtgggttg aggaaagatg  
60  
gatgagaacc gttttgtggc cgttaccagt tccaacgcag ctaagcttct gaacctgtat  
120  
ccccgcaagg gccgcattat tcccggagcc gatgctgatg tgggtggtgtg ggacccagaa  
180  
gccacaaaga ccattctcagc cagcacgcag gtccagggag gagacttcaa cctgtatgag  
240  
aacatgcgct gccacggcgt gccactggtc accatcagcc gggggcgcgct cgtgtatgag  
300  
aacggcgtct tcatgtgcgc cgagggcacc ggcaagttct gtcccctgag gtccttccca  
360  
gacactgtct acaagaagct ggtccagaga gagaagactt taaaggtag aggagtggcc  
420  
cgcactccct acctggggga tgctgctggt gtcgtgcac  
459

&lt;210&gt; 2326

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2326

Xaa	Arg	Val	Gln	Asp	Arg	Met	Ser	Ala	Ile	Trp	Glu	Arg	Gly	Val	Val	
1			5					10					15			
Gly	Gly	Lys	Met	Asp	Glu	Asn	Arg	Phe	Val	Ala	Val	Thr	Ser	Ser	Asn	
			20					25					30			
Ala	Ala	Lys	Leu	Leu	Asn	Leu	Tyr	Pro	Arg	Lys	Gly	Arg	Ile	Ile	Pro	
		35					40					45				
Gly	Ala	Asp	Ala	Asp	Val	Val	Val	Trp	Asp	Pro	Glu	Ala	Thr	Lys	Thr	
	50					55					60					
Ile	Ser	Ala	Ser	Thr	Gln	Val	Gln	Gly	Gly	Asp	Phe	Asn	Leu	Tyr	Glu	
65					70					75					80	
Asn	Met	Arg	Cys	His	Gly	Val	Pro	Leu	Val	Thr	Ile	Ser	Arg	Gly	Arg	
				85					90					95		
Val	Val	Tyr	Glu	Asn	Gly	Val	Phe	Met	Cys	Ala	Glu	Gly	Thr	Gly	Lys	
			100					105					110			
Phe	Cys	Pro	Leu	Arg	Ser	Phe	Pro	Asp	Thr	Val	Tyr	Lys	Lys	Leu	Val	
		115					120					125				
Gln	Arg	Glu	Lys	Thr	Leu	Lys	Val	Arg	Gly	Val	Ala	Arg	Thr	Pro	Tyr	
	130					135						140				
Leu	Gly	Asp	Val	Ala	Val	Val	Val	His								
145						150										

&lt;210&gt; 2327

&lt;211&gt; 599

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2327

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 120  
 tcagagatcc gagcagctga gaagaaattt gggagcaaca aggccgagat ggtggtgcct  
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 540  
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 599

&lt;210&gt; 2328

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2328

Glu	Phe	Gln	Lys	Ile	Lys	Tyr	Ser	Tyr	Asp	Ala	Leu	Glu	Lys	Lys	Gln
1				5					10					15	
Phe	Leu	Pro	Val	Ala	Phe	Pro	Val	Gly	Asn	Ala	Phe	Ser	Tyr	Tyr	Gln
			20					25					30		
Ser	Asn	Arg	Gly	Phe	Gln	Glu	Asp	Ser	Glu	Ile	Arg	Ala	Ala	Glu	Lys
	35						40					45			
Lys	Phe	Gly	Ser	Asn	Lys	Ala	Glu	Met	Val	Val	Pro	Asp	Phe	Ser	Glu
	50					55					60				
Leu	Phe	Lys	Glu	Arg	Ala	Thr	Ala	Pro	Phe	Phe	Val	Phe	Gln	Val	Phe
65					70				75						80
Cys	Val	Gly	Leu	Trp	Cys	Leu	Asp	Glu	Tyr	Trp	Tyr	Tyr	Ser	Val	Phe
			85					90					95		
Thr	Leu	Ser	Met	Leu	Val	Ala	Phe	Glu	Ala	Ser	Leu	Val	Gln	Gln	Gln
			100					105					110		
Met	Arg	Asn	Met	Ser	Glu	Ile	Arg	Lys	Met	Gly	Asn	Lys	Pro	His	Met
		115					120					125			
Ile	Gln	Val	Tyr	Arg	Ser	Arg	Lys	Trp	Arg	Pro	Ile	Ala	Ser	Asp	Glu
	130					135				140					
Ile	Val	Pro	Gly	Asp	Ile	Val	Ser	Ile	Gly	Glu	Ala	Gly	Phe	Arg	Ser
145					150					155					160
Val	Pro	Val	Gly	Ala	Pro	Ala	Ser	Gly	Pro	Leu	Ala	Asn	Pro	Pro	Ala
			165					170					175		
Ser	Ala	Leu	Gln	Ala	Ala	Pro	His	Arg	Arg	Thr	Trp	Cys	His	Val	Thr

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Cys Phe Cys Cys Glu Ala Ala  
195

185

190

<210> 2329  
<211> 392  
<212> DNA  
<213> Homo sapiens

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120  
atgagcacgc aaccactga ggaaccactc cgactagttg tggcattcaa tccagtgcct  
180  
agtgcctccc gggttgctca tcatcatgcg acgagatttc gcctggcggt gcaggccttc  
240  
attgtcgtcg tcattggtgg tttgttgtgg gcgttgacgg ccgacgcctt ccagttatcg  
300  
acggtgatgt ggatgctcgg ggcattgggtg gtgctattcc tcgtgctttt cgtcatccag  
360  
aatctgcggc tgcacgccgc tcgcaaggat cc  
392

<210> 2330  
<211> 90  
<212> PRT  
<213> Homo sapiens

<400> 2330  
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Asn Pro Val Pro Ser Ala Ser Arg Val Ala His His His Ala Thr Arg  
20 25 30  
Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu  
35 40 45  
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp  
50 55 60  
Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln  
65 70 75 80  
Asn Leu Arg Leu His Ala Ala Arg Lys Asp  
85 90

<210> 2331  
<211> 2813  
<212> DNA  
<213> Homo sapiens

<400> 2331  
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gatttaaggt gcccagagtcc acgctgatgg actgccgtag acaactgaaa gacagtaagc  
120

aaattttatc tattacaaag aacttttaaag ttgagaatat tggacctctt cctataactg  
180  
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240  
gggattcagt ttcccctgga cccaaacaca tcccgcgata tcagcattgt gttcactcca  
300  
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360  
tttcgcttca ctctcaatgt gactctccct catcacctgt tggccttggtg tgcagacgtg  
420  
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480  
tccctgttgg gtgtgatttt aatagccttc caacaagcac agtacattct catggaattc  
540  
atgaaaacaa gacagaggca aaatgctagc tcctcttcac agcaaaacaa tggtcctatg  
600  
gatgtaatca gccccattc ttacaaaagc aattgcaaga actttctcga tacatatggc  
660  
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720  
cagaatgctg caaagaggag cccagccacc tatggtcatt ctcagaagaa gcacaaatgc  
780  
tcagtgtatt acagtaaaca caaaaccagc acagctgcgg ccagcagcac cagcacgact  
840  
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900  
tgcactgatg ccatgcgtga gaactggatc agcctcagat atgcaagtgg cataaatgtc  
960  
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1020  
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1080  
acatgtatgt ttcctaagga aactgacatt aaaacttcag agaacacagc tgagttcaag  
1140  
gaacgggagc tctgtccact gaagacctcc aagaaactac ctgaaaacca tttaccaaga  
1200  
aactcacctc agtaccacca gccagacttg ccagaaattt ccaggaaaaa taatgggaat  
1260  
aaccagcaag tacctgtcaa gaatgaagta gatcattgtg aaaatttgaa gaagggtggac  
1320  
acaaagcctt cttcagaaaa gaagattcac aaaacatcta gagaagacat gttttctgag  
1380  
aaacaggaca tacctttcgt agagcaagaa gatccttata ggaagaaaaa gcttcaggag  
1440  
aaaagagaag gaaatttaca aaatttaaag tggagtaaaa gtcgaacatg tagaaagaac  
1500  
aagaaaaggg gtgttgctcc agtctcaagg cctcctgaac agagtgatct aaagcttggtg  
1560  
tgcagtgact ttgagaggtc tgagctgagc agtgacatca atgtaagaag ctgggtgtata  
1620  
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1680  
gccagagag aggcagggtta ctaccagaag cctgagaaga aatgtgtgga caagttctgc  
1740

tccgattcca gctctgactg tgggagctcc tctggcagcg tgcgtgccag ccggggcagc  
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 1860  
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 1920  
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 1980  
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 2040  
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 2100  
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 2160  
 agtttcattg attggagtgc aacatgcgaa ggccagtttt ccagcgcata ctgtccattg  
 2220  
 gaattgaacg attacaatgc ctttccagaa gaaaacatga actatgccaa tggcttcccc  
 2280  
 tgtcctgcag atgttcagac agactttatt gatcacaact ctcagtctac ctggaacacc  
 2340  
 ccaccaaca tgctgtctgc ctggggacat gccagtttca tcagctctcc gccctacctc  
 2400  
 acaagcacc gaagcttgct tccaatgtct ggactttttg gttccatctg ggccccgcaa  
 2460  
 agcgatgtgt atgaaaattg ctgccccatc aaccccacca cggaacattc gaccacatg  
 2520  
 gaaaaccaag cggtcgtgtg caaggaatac taccgggggt tcaaccggtt tcgcgcttat  
 2580  
 atgaacctgg acatatggac taccacagcg aataggaatg caaatttccc actgtctaga  
 2640  
 gactcgagtt actgtgggaa tgtgtgaaaa taattggatt tttaaacaat gtgaataaag  
 2700  
 aggcttgtgt tttgattact agtgtaaact ggttattgag atagattatg acattggtgg  
 2760  
 atattttggc acttttatat gaaaataaat tttttaatga aaaaaaaaaa aaa  
 2813

&lt;210&gt; 2332

&lt;211&gt; 789

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2332

Pro	Asp	Phe	Thr	Ser	Ser	Trp	Val	Ile	Arg	Asp	Leu	Ser	Leu	Val	Thr
1				5				10						15	
Ala	Ala	Asp	Leu	Glu	Phe	Arg	Phe	Thr	Leu	Asn	Val	Thr	Leu	Pro	His
			20					25					30		
His	Leu	Leu	Pro	Leu	Cys	Ala	Asp	Val	Val	Pro	Gly	Pro	Ser	Trp	Glu
		35				40					45				
Glu	Ser	Phe	Trp	Arg	Leu	Thr	Val	Phe	Phe	Val	Ser	Leu	Ser	Leu	Leu
	50				55						60				
Gly	Val	Ile	Leu	Ile	Ala	Phe	Gln	Gln	Ala	Gln	Tyr	Ile	Leu	Met	Glu
65				70				75					80		
Phe	Met	Lys	Thr	Arg	Gln	Arg	Gln	Asn	Ala	Ser	Ser	Ser	Ser	Gln	Gln



1705

515	520	525
Asp Ser Val Ser Gln Asn	Asp Phe Pro Ser Glu Ala	Pro Ile Ser Leu
530	535	540
Asn Leu Ser His Asn Ile	Cys Asn Pro Met Thr	Val Asn Ser Leu Pro
545	550	555
Gln Tyr Ala Glu Pro Ser	Cys Pro Ser Leu Pro	Ala Gly Pro Thr Gly
565	570	575
Val Glu Glu Asp Lys Gly	Leu Tyr Ser Pro Gly	Asp Leu Trp Pro Thr
580	585	590
Pro Pro Val Cys Val Thr	Ser Ser Leu Asn Cys	Thr Leu Glu Asn Gly
595	600	605
Val Pro Cys Val Ile Gln	Glu Ser Ala Pro Val	His Asn Ser Phe Ile
610	615	620
Asp Trp Ser Ala Thr Cys	Glu Gly Gln Phe Ser	Ser Ala Tyr Cys Pro
625	630	635
Leu Glu Leu Asn Asp Tyr	Asn Ala Phe Pro Glu	Glu Asn Met Asn Tyr
645	650	655
Ala Asn Gly Phe Pro Cys	Pro Ala Asp Val Gln	Thr Asp Phe Ile Asp
660	665	670
His Asn Ser Gln Ser Thr	Trp Asn Thr Pro Pro	Asn Met Pro Ala Ala
675	680	685
Trp Gly His Ala Ser Phe	Ile Ser Ser Pro Pro	Tyr Leu Thr Ser Thr
690	695	700
Arg Ser Leu Ser Pro Met	Ser Gly Leu Phe Gly	Ser Ile Trp Ala Pro
705	710	715
Gln Ser Asp Val Tyr Glu	Asn Cys Cys Pro Ile	Asn Pro Thr Thr Glu
725	730	735
His Ser Thr His Met Glu	Asn Gln Ala Val Val	Cys Lys Glu Tyr Tyr
740	745	750
Pro Gly Phe Asn Pro Phe	Arg Ala Tyr Met Asn	Leu Asp Ile Trp Thr
755	760	765
Thr Thr Ala Asn Arg Asn	Ala Asn Phe Pro Leu	Ser Arg Asp Ser Ser
770	775	780
Tyr Cys Gly Asn Val		
785		

&lt;210&gt; 2333

&lt;211&gt; 501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2333

cgtatgattg gtgtgggaca aatactattc aacaagagta cctaaatcat tgtttaaggc  
60

gaagtaataa atatgaatgg ggtgtatcat ataatgaaca acgaatatcc atatagtgc  
120

gacgaagttc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta  
180

aaaagctatc atattgctta tgaagcacat aaaggtcagt tccgaaaaaa cggattacca  
240

tacattatgc atcctataca agttgcaggt attttaacag aaatgcgatt agacggaccg  
300

acgattgtcg cagggtttttt gcatgatgta attgaagata caccgtatac atttgaagat  
360

gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atggtgtgac gaagcttaaa  
 420  
 aaaataaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttatttatt  
 480  
 gcgattgccca aagatgtacg c  
 501

<210> 2334  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 2334  
 Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala  
 1 5 10 15  
 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr  
 20 25 30  
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly  
 35 40 45  
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val  
 50 55 60  
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala  
 65 70 75 80  
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp  
 85 90 95  
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val  
 100 105 110  
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala  
 115 120 125  
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg  
 130 135 140

<210> 2335  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2335  
 ggatcctgag cgtggggact tctttgcact ccacagaacc ctcacttgta cctctacttt  
 60  
 tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac  
 120  
 cccatggggcc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc  
 180  
 acccgctgac agttggaaca ggaggctgag agcttttaggg agctggaggg ccctgcccag  
 240  
 ggcagcccac ccagccctgg tgaggaggcc ctggtcccta ctttcccact ggccaagccc  
 300  
 cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttccaca  
 360  
 gcatttcat cagcatcggg cactagt  
 387

<210> 2336

<211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2336  
 Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu  
 1 5 10 15  
 Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His  
 20 25 30  
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser  
 35 40 45  
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly  
 50 55 60  
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn  
 65 70 75 80  
 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser  
 85 90 95  
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser  
 100 105

<210> 2337  
 <211> 359  
 <212> DNA  
 <213> Homo sapiens

<400> 2337  
 ngagaagagg aggagtcac gccaggggcc gccatctcca gccctcgcca agccgctggg  
 60  
 accatgtgca gctcaagaat gccctccggc ccatcggcct cggggcaggg gaagggcagc  
 120  
 ttctctgcac cagcttcctt gctgggctcc agggcccaca ggctgaggcc gggggcccag  
 180  
 ggggtcaatgc caggcacctt gctattgagg aacctatcca ggaggaagga ctccgggcaga  
 240  
 cctgcgggat cctcgtcctc ccacgggtcc tcatggcaga agcagaagga gctggagtcg  
 300  
 ctgaggtccg tgggcaggcg ggctgggccc aacgtggggt caccgacctc ctcaaagct  
 359

<210> 2338  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2338  
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly  
 1 5 10 15  
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His  
 20 25 30  
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu  
 35 40 45  
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser  
 50 55 60  
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu

65                      70                      75                      80  
Arg Ser Val Gly Arg Arg Ala Gly Pro Asn Val Gly Ser Pro Thr Ser  
                         85                      90                      95  
Ser Lys

<210> 2339  
<211> 439  
<212> DNA  
<213> Homo sapiens

<400> 2339  
acgcgtggcg tcagtccagg cagacttggg aggtcgcccta caccgtcaac tcggttgcca  
60  
ccctgtcctc caccttcgtc gtcgcagtcg tcagtgtcct gtggtttgtg ccctccgggc  
120  
actggtcccg gtagggcttg taatgctggg gcgctcggcg cgatgtgcca gttccttggt  
180  
gagttactcc tctacactgg tgtgaacaag accggagaaat tcccccccat attctcgttt  
240  
cccgtcgtc ccgcacgtca ttgggactgg cttttacgcg gtagtggttg ccgtactctg  
300  
gttgctctgc ggcacggtcg gcagggggat catgtcatga gtccgacggt gagcgagcgg  
360  
cgtcttagcg cgccaatgcg acgtggcatc gtggcactgt gcgtggcgat ggccttcgtg  
420  
ttgtcggggg gcggtgctg  
439

<210> 2340  
<211> 92  
<212> PRT  
<213> Homo sapiens

<400> 2340  
Met Cys Gln Phe Leu Gly Glu Leu Leu Leu Tyr Thr Gly Val Asn Lys  
1                      5                      10                      15  
Thr Gly Glu Phe Pro Pro Ile Phe Ser Phe Pro Ala Arg Pro Ala Arg  
20                      25                      30  
His Trp Asp Trp Leu Leu Arg Gly Ser Gly Cys Arg Thr Leu Val Ala  
35                      40                      45  
Leu Arg His Gly Arg Gln Gly Asp His Val Met Ser Pro Thr Val Ser  
50                      55                      60  
Glu Arg Arg Leu Ser Ala Pro Met Arg Arg Gly Ile Val Ala Leu Cys  
65                      70                      75                      80  
Val Ala Met Ala Phe Val Leu Ser Gly Cys Gly Ala  
85                      90

<210> 2341  
<211> 411  
<212> DNA  
<213> Homo sapiens

<400> 2341

gccaaacctc ccctccatcc tgcccaagat ggatcttget gagcctccct ggcataatgcc  
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tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaagggag aagaggagag  
120  
ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctctgtgag cgggtcccca  
180  
ggagccaccg cacaggccca tgccccttca cctagcacca gcagcagcac cagcagccag  
240  
agtctgggg ccacccggca caggcaggag gattctggag accaggccac atcaggcnat  
300  
ggaagtggag agcagtgtga aaccacctt gtcagtggcc tcagtacccc caagtacagt  
360  
ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n  
411

&lt;210&gt; 2342

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2342

Ala	Ser	Leu	Ala	Tyr	Ala	Ser	Ala	Gly	Gly	Ala	Arg	Gly	Gly	His	Gly
1			5					10					15		
Gly	Gly	Gly	Gly	Lys	Gly	Arg	Arg	Gly	Glu	Gly	Glu	Gly	Ser	Arg	Gly
		20						25					30		
Gly	Gly	Gly	Arg	Gly	Arg	Ala	Ala	Pro	Val	Ser	Gly	Ser	Pro	Gly	Ala
		35					40					45			
Thr	Ala	Gln	Ala	His	Ala	Pro	Ser	Pro	Ser	Thr	Ser	Ser	Ser	Thr	Ser
	50					55				60					
Ser	Gln	Ser	Pro	Gly	Ala	Thr	Arg	His	Arg	Gln	Glu	Asp	Ser	Gly	Asp
65				70					75					80	
Gln	Ala	Thr	Ser	Gly	Xaa	Gly	Ser	Gly	Glu	Gln	Cys	Glu	Thr	His	Leu
			85					90						95	
Val	Ser	Ala	Leu	Ser	His	Pro	Lys	Tyr	Ser	Gly	Pro	Gly	Gly	Ser	Glu
			100					105						110	

Leu

&lt;210&gt; 2343

&lt;211&gt; 522

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2343

ggcccgagc agatgctgat gccttcacag tttcccaacc agggccagca gggattctct  
60  
ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc  
120  
agccctgatc agagctcaat gcccatgagc aacgtgggca ccacccggct cagccacatg  
180  
cctctgcccc ctgcgtccaa tcctcctggg accgtgcatt cagccccaaa ccggggggcta  
240  
ggcaggcggc cttcggacct caccatcagt attaatacaga tgggctcacc gggcatgggg  
300

cacttgaagt cgcccaccct tagccaggtg cactcacccc tggtcacctc gccctctgcc  
360  
aacctcaagt caccacagac tccctcacag atggtgcctt tgccttctgc caaccgcca  
420  
ggacctctca agtcgccccca ggtcctcggc tcttccctca gtgtccgttc acccactggc  
480  
tcgcccagca ggctcaagtc tccttccatg gcggtgcctt ct  
522

<210> 2344  
<211> 174  
<212> PRT  
<213> Homo sapiens

<400> 2344  
Gly Pro Gln Lys Met Leu Met Pro Ser Gln Phe Pro Asn Gln Gly Gln  
1 5 10 15  
Gln Gly Phe Ser Gly Gly Gln Gly Pro Tyr Gln Ala Met Ser Gln Asp  
20 25 30  
Met Gly Asn Thr Gln Asp Met Phe Ser Pro Asp Gln Ser Ser Met Pro  
35 40 45  
Met Ser Asn Val Gly Thr Thr Arg Leu Ser His Met Pro Leu Pro Pro  
50 55 60  
Ala Ser Asn Pro Pro Gly Thr Val His Ser Ala Pro Asn Arg Gly Leu  
65 70 75 80  
Gly Arg Arg Pro Ser Asp Leu Thr Ile Ser Ile Asn Gln Met Gly Ser  
85 90 95  
Pro Gly Met Gly His Leu Lys Ser Pro Thr Leu Ser Gln Val His Ser  
100 105 110  
Pro Leu Val Thr Ser Pro Ser Ala Asn Leu Lys Ser Pro Gln Thr Pro  
115 120 125  
Ser Gln Met Val Pro Leu Pro Ser Ala Asn Pro Pro Gly Pro Leu Lys  
130 135 140  
Ser Pro Gln Val Leu Gly Ser Ser Leu Ser Val Arg Ser Pro Thr Gly  
145 150 155 160  
Ser Pro Ser Arg Leu Lys Ser Pro Ser Met Ala Val Pro Ser  
165 170

<210> 2345  
<211> 561  
<212> DNA  
<213> Homo sapiens

<400> 2345  
nagatctccg tcttgatctt gagcaccgag gcaactggggg gggaggacag cagccgcggg  
60  
ggcctccacc agcccgcgtc caggccgcct gggctcgacg cgctggacag gcgcccggcg  
120  
ctggcgctgc cgcccttttg ccgtttccgc cttttcttgc gcttctgggtg cttgctggag  
180  
gcctgcgcgc ccgcctcgcc tgcgctgtcc gagtccttgg cgctgtcgga cgtgagtgac  
240  
tcgcagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat  
300

gcaaataaaa agaataatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac  
 360  
 acacccatgg acatcgacaca gctcccccat ctgccggaga aaacttccga atcctcggag  
 420  
 acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacgagAAC  
 480  
 tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagacccg gagcccgacc  
 540  
 ggaagaagtc gggcaacgcg t  
 561

<210> 2346  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

<400> 2346  
 Xaa Ile Ser Val Leu Ile Leu Ser Thr Glu Ala Leu Gly Gly Glu Asp  
 1 5 10 15  
 Ser Ser Arg Gly Gly Leu His Gln Pro Ala Ser Arg Pro Pro Gly Leu  
 20 25 30  
 Asp Ala Leu Asp Arg Arg Arg Arg Leu Ala Leu Pro Pro Phe Cys Arg  
 35 40 45  
 Phe Arg Leu Phe Leu Arg Phe Trp Cys Leu Leu Glu Ala Cys Ala Pro  
 50 55 60  
 Ala Ser Pro Ala Leu Ser Glu Ser Leu Ala Leu Ser Asp Val Ser Asp  
 65 70 75 80  
 Ser Gln Phe Cys Ser Arg Arg Ser Asp Ser Leu Ser Thr Ile Ala Ile  
 85 90 95  
 Asn Ala Lys Asn Ala Asn Glu Lys Asn Ile Ile Trp Val Asn Tyr Leu  
 100 105 110  
 Leu Ser Asn Pro Glu Tyr Lys Asp Thr Pro Met Asp Ile Ala Gln Leu  
 115 120 125  
 Pro His Leu Pro Glu Lys Thr Ser Glu Ser Ser Glu Thr Ser Asp Ser  
 130 135 140  
 Glu Ser Asp Ser Lys Asp Thr Ser Gly Ile Thr Glu Asp Asn Glu Asn  
 145 150 155 160  
 Ser Lys Xaa Pro Thr Arg Arg Gly Thr Ser Pro Arg Thr Ala Lys Thr  
 165 170 175  
 Arg Ser Pro Thr Gly Arg Ser Arg Ala Thr Arg  
 180 185

<210> 2347  
 <211> 375  
 <212> DNA  
 <213> Homo sapiens

<400> 2347  
 atcagcgaag aacacggcag gaccctggaa gacgccgccg gtgaattgaa gcgtgggtatc  
 60  
 gagaacgtcg agtacgcctg cgccgcgccg gaagtactga aggggtgaata cagccgtaac  
 120  
 gtcgggtccga acatcgacgc ctgggtccgat ttccagccgc tgggcgtggt ggcggggatc  
 180



acgccattca acttcccggc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc  
 240  
 ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc  
 300  
 cagctgttgc aggaagccgg tttgccc aaa ggtgtgctga acgtggtgca tggtgacaag  
 360  
 accgcggtgg acgcg  
 375

<210> 2348

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2348

Ile	Ser	Glu	Glu	His	Gly	Arg	Thr	Leu	Glu	Asp	Ala	Ala	Gly	Glu	Leu
1				5				10						15	
Lys	Arg	Gly	Ile	Glu	Asn	Val	Glu	Tyr	Ala	Cys	Ala	Ala	Pro	Glu	Val
		20					25						30		
Leu	Lys	Gly	Glu	Tyr	Ser	Arg	Asn	Val	Gly	Pro	Asn	Ile	Asp	Ala	Trp
	35					40					45				
Ser	Asp	Phe	Gln	Pro	Leu	Gly	Val	Val	Ala	Gly	Ile	Thr	Pro	Phe	Asn
	50				55					60					
Phe	Pro	Ala	Met	Val	Pro	Leu	Trp	Met	Tyr	Pro	Leu	Ala	Ile	Val	Cys
65				70					75					80	
Gly	Asn	Cys	Phe	Ile	Leu	Lys	Pro	Ser	Glu	Arg	Asp	Pro	Ser	Ser	Thr
			85					90					95		
Leu	Leu	Ile	Ala	Gln	Leu	Leu	Gln	Glu	Ala	Gly	Leu	Pro	Lys	Gly	Val
		100					105					110			
Leu	Asn	Val	Val	His	Gly	Asp	Lys	Thr	Ala	Val	Asp	Ala			
	115						120					125			

<210> 2349

<211> 417

<212> DNA

<213> Homo sapiens

<400> 2349

nnnaaaaaaaaa aaaaaacacaa tattttaatgg acgcggttta ttcagcaggt  
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 gctgacaaag tttttggtgt cccaggagat tttaatctag cctttttaga tgatattatt  
 120  
 gcacataatc atattaaatg gattggtaat acaaatgaac ttaatgcaag ttatgccgct  
 180  
 gacggatatg cacgtattaa tggcatcggt gcaatggtaa caacatttgg agtgggtgaa  
 240  
 ttaagtgctg tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatc  
 300  
 actggggcac ctactcgagc tgtagaacaa gaaggcaaat acgttcacca ttccttggc  
 360  
 gaaggaactt ttgatgatta tagaaaaatg tttgagccta ttacaacagc gcaagct  
 417

<210> 2350

<211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2350

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Xaa Lys Lys Lys Lys Lys Lys Lys Thr Gln Tyr Leu Met Asp Ala Val
 1           5           10           15
Tyr Ser Ala Gly Ala Asp Lys Val Phe Gly Val Pro Gly Asp Phe Asn
      20           25           30
Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile
      35           40           45
Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala
      50           55           60
Arg Ile Asn Gly Ile Gly Ala Met Val Thr Thr Phe Gly Val Gly Glu
65           70           75           80
Leu Ser Ala Val Asn Gly Ile Ala Gly Ser Tyr Ala Glu Arg Val Pro
      85           90           95
Val Ile Ala Ile Thr Gly Ala Pro Thr Arg Ala Val Glu Gln Glu Gly
      100          105          110
Lys Tyr Val His His Ser Leu Gly Glu Gly Thr Phe Asp Asp Tyr Arg
      115          120          125
Lys Met Phe Glu Pro Ile Thr Thr Ala Gln Ala
      130          135

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<210> 2351  
 <211> 696  
 <212> DNA  
 <213> Homo sapiens

<400> 2351

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nacgcgttgc cgcgcgataa ctctggtgag ggtcttgctg gggccctgct ggccttggt
60
ggctccgccc agctgtgcga ccgttcctgg atcaccgacc agtatgaccg gttcgtgcgt
120
ggcaataactg tgctcgctca gccgaatgat gccggcatga ttcgtattga cgacaacctc
180
ggcatcgcgc tgtccttgga cgctaacgga cgccagacca cccttaaccc gtatcttggc
240
gcccagctgg ctctttgcga ggcttaccgg aatgtggctg tctctggcgc aactccggtg
300
gctgtcactg attgcctcaa ttatggctcc ccgtacgata ccgatgtcat gtggcaatc
360
gacgagacca tccttgggtct ggttgacggc tgccgcgagc ttggcgtgcc ggttacgggc
420
ggtaacgttt ccctgcacaa ccgcactgga gatgagtcga ttcggcctac tccgctcggt
480
ggtgtgctcg gcgttattga tgacgtgcat cgtcgcatcc cgtcggcctt cgcacacgac
540
ggcgacgctg tcttgctgct aggaacgacg aagtgcgagt tcggcggatc ggtctatgag
600
gacgtcatcc acgctggcca cctagggcgt atgccccga tgcccacct gaatgccgag
660
aaggccctgg ccgcggtgat ggtggaagcg tcgaag
696

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<210> 2352  
 <211> 232  
 <212> PRT  
 <213> Homo sapiens

<400> 2352  
 Xaa Ala Leu Pro Arg Asp Asn Ser Gly Glu Gly Leu Ala Gly Ala Leu  
 1 5 10 15  
 Leu Ala Leu Val Gly Ser Ala Gln Leu Cys Asp Arg Ser Trp Ile Thr  
 20 25 30  
 Asp Gln Tyr Asp Arg Phe Val Arg Gly Asn Thr Val Leu Ala Gln Pro  
 35 40 45  
 Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu  
 50 55 60  
 Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly  
 65 70 75 80  
 Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly  
 85 90 95  
 Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr  
 100 105 110  
 Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val  
 115 120 125  
 Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser  
 130 135 140  
 Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val  
 145 150 155 160  
 Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala  
 165 170 175  
 Phe Ala His Asp Gly Asp Ala Val Leu Leu Leu Gly Thr Thr Lys Cys  
 180 185 190  
 Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu  
 195 200 205  
 Gly Gly Met Pro Pro Met Pro Asp Leu Asn Ala Glu Lys Ala Leu Ala  
 210 215 220  
 Ala Val Met Val Glu Ala Ser Lys  
 225 230

<210> 2353  
 <211> 422  
 <212> DNA  
 <213> Homo sapiens

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<211> 1000  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 2356

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Leu Ser Asn Gln Asn Met Leu Leu Arg Gly Cys Val Leu Arg Asn Thr  
35 40 45  
Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu  
50 55 60  
Met Gln Asn Ser Gly Arg Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg  
65 70 75 80  
Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Val Cys Met  
85 90 95  
Gly Val Ile Leu Ala Ile Gly Asn Ala Ile Trp Glu His Glu Val Gly  
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Met Arg Phe Gln Val Tyr Leu Pro Trp Asp Glu Ala Val Asp Ser Ala  
115 120 125  
Phe Phe Ser Gly Phe Leu Ser Phe Trp Ser Tyr Ile Ile Ile Leu Asn  
130 135 140  
Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu  
145 150 155 160  
Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys  
165 170 175  
Lys Arg Thr Pro Ala Glu Ala Arg Thr Thr Thr Leu Asn Glu Glu Leu  
180 185 190  
Gly Gln Val Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln  
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Asp Val Phe Asp Val Leu Gly His Lys Ala Glu Leu Gly Glu Arg Pro  
225 230 235 240  
Glu Pro Val Asp Phe Ser Phe Asn Pro Leu Ala Asp Lys Lys Phe Leu  
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Phe Trp Asp Pro Ser Leu Leu Glu Ala Val Lys Ile Gly Asp Pro His  
260 265 270  
Thr His Glu Phe Phe Arg Leu Leu Ser Leu Cys His Thr Val Met Ser  
275 280 285  
Glu Glu Lys Asn Glu Gly Glu Leu Tyr Tyr Lys Ala Gln Ser Pro Asp  
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Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Val Phe Arg  
305 310 315 320  
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Met Ser Val Ile Val Arg Asn Pro Glu Gly Lys Ile Arg Leu Tyr Cys  
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Lys Gly Ala Asp Thr Ile Leu Leu Asp Arg Leu His His Ser Thr Gln  
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Glu Leu Leu Asn Thr Thr Met Asp His Leu Asn Glu Tyr Ala Gly Glu  
385 390 395 400  
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Tyr Glu Glu Trp Ala Glu Arg Arg Leu Gln Ala Ser Leu Ala Gln Asp



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 Val Pro Glu Thr Ile Ala Leu Leu Thr Leu Ala Asn Ile Lys Ile Trp  
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 Cys Lys Met Leu Thr Asp Asp Met Thr Glu Val Phe Ile Val Thr Gly  
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 Gly Glu Tyr Ala Leu Val Ile Asn Gly His Ser Leu Ala His Ala Leu  
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 580 585 590  
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 740 745 750  
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 820 825 830  
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865	870	875
Val Leu Thr Thr Val Val	Cys Ile Met Pro Val	Val Ala Phe Arg Phe
885	890	895
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Gln Leu Val Arg Lys Lys	Gln Lys Ala Gln His	Arg Cys Met Arg Arg
915	920	925
Val Gly Arg Thr Gly Ser	Arg Arg Ser Gly Tyr	Ala Phe Ser His Gln
930	935	940
Glu Gly Phe Gly Glu Leu	Ile Met Ser Gly Lys	Asn Met Arg Leu Ser
945	950	955
Ser Leu Ala Leu Ser Ser	Phe Thr Thr Arg Ser	Ser Ser Ser Trp Ile
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 <211> 408  
 <212> DNA  
 <213> Homo sapiens

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<210> 2358  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

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35 40 45
Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser

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Arg Phe Ala Asp Gly Thr Glu Val Lys Ala His Asn Phe Val Lys Ala
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<210> 2359  
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 <212> DNA  
 <213> Homo sapiens

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324

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<210> 2360  
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 <212> PRT  
 <213> Homo sapiens

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Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile
35      40      45
Glu Trp Ile His His Ala Arg Arg Arg Ile Ala Gly Ile Val Ile Asn
50      55      60
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile
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85      90      95
Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg
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<210> 2361  
 <211> 398  
 <212> DNA  
 <213> Homo sapiens

<400> 2361

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 398

<210> 2362  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2362  
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 35 40 45  
 Lys Ala Gln Gln His Thr Val Ser Gln Val Cys Gln Val Pro Gln His  
 50 55 60  
 Gly His Pro Ala Leu Thr Ala Pro Pro Arg Leu Pro Ala Cys His His  
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 Leu His Lys His Met Leu Gln Leu His Thr Arg Glu Thr Pro His Ala  
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 Arg Phe

<210> 2363  
 <211> 833  
 <212> DNA  
 <213> Homo sapiens

<400> 2363  
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 660  
 cttccaccac ctgctccccc aggggctccg cctcgtgact cagctcagg caagtctccg  
 720  
 ggcggaaca gctggctgat ggtgacatgc tgcagcctgg tcacatcaga aaccatgagg  
 780  
 gtggatctcc ggaggtcatc gatgtggaca gactgccaca gcccttcacg cgt  
 833

<210> 2364  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 2364  
 Xaa Thr Pro Leu Ala Pro Asn Ala Lys Ala Phe Lys Asp Ala Ala Gln  
 1 5 10 15  
 Lys His His Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr  
 20 25 30  
 Ser Leu Pro Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu  
 35 40 45  
 Ser Val Ser Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val  
 50 55 60  
 Leu Ala Ser Val Ser Ile Ala Ser Ser Trp Arg Ser Ser Ala Arg Cys  
 65 70 75 80  
 Ser Lys Pro Thr Ala Xaa Arg Ser Lys Arg Asp Cys Val Thr Thr Gln  
 85 90 95  
 Lys Val Ala Gln Gly Leu Ala Ala Val Pro Ser Gly Ser Leu Cys Ala  
 100 105 110  
 Gln Pro Pro Ser Ala Gly Phe Pro Gly Pro Cys Cys Gly Ala Arg Ser  
 115 120 125  
 Pro Asp Glu Arg Ser Arg Ser  
 130 135

<210> 2365  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 2365  
 accggtgccc agctcccacg gctcgtccag acctacgttg agaaacttcg acgagacagt  
 60  
 ctccgtcagt tcgccaaca acctctgaac gaagtcaaga ttctccggca ctggagccaa  
 120  
 ggtgcttgcc ctggcatgaa cgccccaggg gaggtcgacg ccgtcgggat tctcacaccg  
 180

atggtgatgg gactcgggtt ccaaccacgg ttccatgtga cccagacagt tctggttggc  
 240  
 cccgagctcg atgcctcgtc cgcgacacag accatcgagc cacctcatgt cctccgccgt  
 300  
 cacggggctg cggtcggccc acacctctc ctcaccgcgg taggcaaata ccgcttcacc  
 360  
 atagagctca aggtgattga gaccacaccg cgccatgacg cgcgtcagga aatcaagagt  
 420  
 ggaacgcgt  
 429

<210> 2366  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 2366  
 Met Ala Arg Cys Gly Leu Asn His Leu Glu Leu Tyr Gly Glu Ala Gly  
 1 5 10 15  
 Phe Ala Tyr Arg Gly Glu Glu Glu Val Trp Ala Asp Arg Ser Pro Val  
 20 25 30  
 Thr Ala Glu Asp Met Arg Trp Leu Asp Gly Leu Cys Arg Gly Arg Gly  
 35 40 45  
 Ile Glu Leu Gly Ala Asn Gln Asn Cys Leu Gly His Met Glu Pro Trp  
 50 55 60  
 Leu Glu Thr Glu Ser His His His Arg Cys Glu Asn Pro Asp Gly Val  
 65 70 75 80  
 Asp Leu Pro Trp Gly Val His Ala Arg Ala Ser Thr Leu Ala Pro Val  
 85 90 95  
 Pro Glu Asn Leu Asp Phe Val Gln Arg Leu Leu Gly Glu Leu Thr Glu  
 100 105 110  
 Thr Val Ser Ser Lys Phe Leu Asn Val Gly Leu Asp Glu Pro Trp Glu  
 115 120 125  
 Leu Gly Thr Gly  
 130

<210> 2367  
 <211> 474  
 <212> DNA  
 <213> Homo sapiens

<400> 2367  
 ngtgcacggg agaagacgtg cgcgacgttc ggccggaacct atccgggttc ggccggcagt  
 60  
 ggggggtcacg agctcaccga cgcgcgcgcg ttgcctcgt ggggcgtcga ttctgtcaaa  
 120  
 tacgatcggg gctccgggtga ctccgcgcac gacgaccagg tcgcctcgtt caccgcgatg  
 180  
 cgtgacgcaa tccgatccac cggacgcccc atggtgtaca gcatcaaccc caacagcgaa  
 240  
 tcgccggatc ggtccggagc ccaattcgat tggggcggtg tggcaaccat gacacgtacc  
 300  
 accaacgaca tctcgccggt gtggaccact cggccggcgg gtgccgatgc gacaccggca  
 360

tcggggtatc aggggatccg cgacatcatc gacgccgtgg ccccgatcgg cgcacggggt  
420  
gcgacggcag cttcgtcgac atggacatgc tcgtcgtcgg tgcgggcaac gcgt  
474

<210> 2368  
<211> 158  
<212> PRT  
<213> Homo sapiens

<400> 2368  
Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly  
1 5 10 15  
Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala  
20 25 30  
Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser  
35 40 45  
Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile  
50 55 60  
Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu  
65 70 75 80  
Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr  
85 90 95  
Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro  
100 105 110  
Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp  
115 120 125  
Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala  
130 135 140  
Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg  
145 150 155

<210> 2369  
<211> 408  
<212> DNA  
<213> Homo sapiens

<400> 2369  
ctgaatggca ggcaggcaga ggccaccaga gccagccccc cgagaagccc tgctgagcca  
60  
aaggggagcg ccctgggacc taaccagag ccccatctca ccttcccccg ttctttcaaa  
120  
gtgcctcccc caaccccagt caggacttcg tccatcccag ttcaggaagc acaagaggct  
180  
cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct  
240  
tccacatccg cccgcctcc caggtctacc cagacagggc ccccgagenc agactgcct  
300  
ggggagctca aggccacagc accagccagc ccaaggcttg gccagtccca gtcccaagca  
360  
gatgaacgag ctgggactcc gcctccagcc cctcccctgc cccctcct  
408

<210> 2370

<211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 2370  
 Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser  
 1 5 10 15  
 Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His  
 20 25 30  
 Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg  
 35 40 45  
 Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys  
 50 55 60  
 Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala  
 65 70 75 80  
 Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser  
 85 90 95  
 Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg  
 100 105 110  
 Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro  
 115 120 125  
 Pro Ala Pro Pro Leu Pro Pro Pro  
 130 135

<210> 2371  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 2371  
 gaattcggtg tgcgatgcga gcctgcagcc tgggagcaga gacaaggagc aaaggcggtg  
 60  
 agagggttgc cagggcaccc agttacagct ggagctgcag gggacccatc cctcgagaga  
 120  
 ggcaggcact agtcatgagg caagagatgc ctcagaagag gatgctggcc gcagggcaca  
 180  
 gcagagaggg agatagcccg gggcactcct caggaccggg cctcagggga cagcaaaca  
 240  
 gattcctgat agacgcgcc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt  
 300  
 caggcgggcc aaggttttca tgcagcn  
 327

<210> 2372  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 2372  
 Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu  
 1 5 10 15  
 Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile  
 20 25 30  
 Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys



```

      35              40              45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
      50              55              60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
65              70              75              80
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
      85              90              95
Gly Gly Pro Arg Phe Ser Cys Ser
      100

```

<210> 2373  
 <211> 591  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2373
gaattctgac attcaggaag tcaattgcag aaggtttaac caagttgatt ctgttttacc
60
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
120
cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcatc
180
agaaaatggt accaaagttg agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
240
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
300
cgctttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
360
tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
420
ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
480
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
540
cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
591

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<210> 2374  
 <211> 167  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2374
Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
1              5              10              15
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
      20              25              30
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
      35              40              45
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
      50              55              60
Asn Glu Asn Met Leu Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
65              70              75              80
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```

				85					90					95					
Pro	Asp	Ser	Cys	Glu	Met	Asn	Pro	Asn	Thr	Gln	Met	Thr	Gly	Asn	Gln				
			100					105					110						
Leu	Asn	Leu	Lys	Asn	Met	Glu	Thr	Pro	Ser	Thr	Ser	Asn	Val	Ser	Gly				
		115					120					125							
Arg	Val	Leu	Asp	Asn	Ser	Phe	Cys	Ser	Gly	Gln	Glu	Ser	Ser	Thr	Lys				
		130				135					140								
Gly	Met	Pro	Ala	Lys	Ser	Asp	Ser	Ser	Cys	Ser	Met	Glu	Val	Leu	Ala				
145					150					155					160				
Thr	Cys	Leu	Ser	Leu	Trp	Lys													
				165															

&lt;210&gt; 2375

&lt;211&gt; 535

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2375

```

ntggccatgt cgttgctcag cagcggcacc ctggacagtt accttgagcg tcacaaacaa
60
ctggacgcga tgcgcatgct gcacttcttc gccctcgacg aagaaaaccc cgccagcatc
120
tataactgcc tgcgcgccgc gcggggcaat gccacgcggg tacgcggggcg gatcaccgcc
180
gacatgtggg aaaacctcaa cgccacctgg ctggaaatgc gcagcatcgc cgccggggggc
240
ctggcccggc atggcatcag ccacttctgt gactgggtca agcagcggtc gcacctgttc
300
cgcgggggcaa cctcggggcac catcatgcgc aacgacgctt accggtttat tcgcctgggc
360
acgtttgtcg agcgcgcgga caacacctg cgcttgctgg atgcgcgcta cgaaatgttt
420
ggtgaggagt cggaagaggt cagcgacctg tcggcacgcg ggtattacca gtggagcgcc
480
ctgctgcggg ccttgctcgtc attcgaggcg tataccgaac tgtaccccaa cgcgt
535

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&lt;210&gt; 2376

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2376

Xaa	Ala	Met	Ser	Leu	Leu	Ser	Ser	Gly	Thr	Leu	Asp	Ser	Tyr	Leu	Glu				
1				5				10					15						
Arg	His	Lys	Gln	Leu	Asp	Ala	Met	Arg	Met	Leu	His	Phe	Phe	Ala	Leu				
		20					25					30							
Asp	Glu	Glu	Asn	Pro	Ala	Ser	Ile	Tyr	Asn	Cys	Leu	Arg	Ala	Ala	Arg				
		35				40					45								
Gly	Asn	Ala	His	Ala	Val	Arg	Gly	Arg	Ile	Thr	Ala	Asp	Met	Trp	Glu				
	50				55				60										
Asn	Leu	Asn	Ala	Thr	Trp	Leu	Glu	Met	Arg	Ser	Ile	Ala	Ala	Gly	Gly				
65				70				75				80							
Leu	Ala	Arg	His	Gly	Ile	Ser	His	Phe	Cys	Asp	Trp	Val	Lys	Gln	Arg				

				85					90					95					
Ser	His	Leu	Phe	Arg	Gly	Ala	Thr	Ser	Gly	Thr	Ile	Met	Arg	Asn	Asp				
			100					105						110					
Ala	Tyr	Arg	Phe	Ile	Arg	Leu	Gly	Thr	Phe	Val	Glu	Arg	Ala	Asp	Asn				
		115					120						125						
Thr	Leu	Arg	Leu	Leu	Asp	Ala	Arg	Tyr	Glu	Met	Phe	Gly	Glu	Glu	Ser				
		130				135						140							
Glu	Glu	Val	Ser	Asp	Leu	Ser	Ala	Arg	Gly	Tyr	Tyr	Gln	Trp	Ser	Ala				
145					150					155					160				
Leu	Leu	Arg	Ala	Leu	Ser	Ser	Phe	Glu	Ala	Tyr	Thr	Glu	Leu	Tyr	Pro				
			165					170						175					

Asn Ala

<210> 2377  
 <211> 622  
 <212> DNA  
 <213> Homo sapiens

<400> 2377  
 acgcgtgaag gggtgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg  
 60  
 agcaccagg agatgaaagg aaccaatcct ggggtggcct gcaccaggct tatcaacccc  
 120  
 tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt cacccttctg  
 180  
 ataaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa  
 240  
 atatgtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta  
 300  
 aatataatgt tctttgccct gaatgattta agtggcatga taaaactcat gccacagact  
 360  
 gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt  
 420  
 agagttagaa ttattaatag ttccctatcta ctatttaatt taatcatagt taatgatgag  
 480  
 aatttcttaa atttaaagct tctgatgatg ctaaagtgc atttctcatg attccttaaa  
 540  
 acaatttttg taaattctat tcctaggacc ttctgctttc agaaaaatta atgtcttgta  
 600  
 ttcttcgtat tggaggagat ct  
 622

<210> 2378  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2378  
 Met Ser Phe Ile Met Pro Leu Lys Ser Phe Arg Ala Lys Asn Ile Ile  
 1 5 10 15  
 Phe Thr Phe Gln Phe Tyr Val Cys Gln Ser Ile Leu Phe Tyr Ala Phe  
 20 25 30  
 Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro

```

      35          40          45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
      50          55          60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
65          70          75          80
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
      85          90          95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
      100          105

```

&lt;210&gt; 2379

&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2379

```

tcatgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
180
cagtgtgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgctcac
240
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
300
cacacacaag caggggaagct gtgcagcagt ggggagaaaag ca
342

```

&lt;210&gt; 2380

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2380

```

Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
  1          5          10          15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
      20          25          30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
      35          40          45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
      50          55          60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
65          70          75          80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
      85          90          95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
      100          105          110
Ser

```

&lt;210&gt; 2381

&lt;211&gt; 434

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2381

gtgcaccctg gccatatgga cgccagcgac gtcggcgtct tgcgtgacgt ggaaccgatc  
60  
ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg  
120  
ccgtcctctt tgacatggac ggaaccctgc tcaacaccct gccggcctgg tgcgtggcat  
180  
ctgagcatct gtggggcact tctctggctg acgtgacag cgccaagggt gacgggggca  
240  
ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat ccccaggcca  
300  
ccatcgagcg tttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc  
360  
ccggagctga ccgcctcgtg aagaggctgt caggatcatgt acccatcgct gtggtgtcga  
420  
attccccgac gcgt  
434

&lt;210&gt; 2382

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2382

Met	Val	Thr	Met	Tyr	Pro	Pro	Gln	Gln	Val	Asp	Ala	Val	Leu	Phe	Asp
1				5					10					15	
Met	Asp	Gly	Thr	Leu	Leu	Asn	Thr	Leu	Pro	Ala	Trp	Cys	Val	Ala	Ser
			20					25					30		
Glu	His	Leu	Trp	Gly	Thr	Ser	Leu	Ala	Asp	Ala	Asp	Ser	Ala	Lys	Val
		35					40					45			
Asp	Gly	Gly	Thr	Val	Asp	Asp	Val	Val	Glu	Leu	Tyr	Leu	Arg	Asp	His
	50					55					60				
Pro	Gln	Ala	Asp	Pro	Gln	Ala	Thr	Ile	Glu	Arg	Phe	Met	Asp	Ile	Leu
65					70				75					80	
Asp	Ala	Asn	Leu	Ala	Gly	His	Thr	Glu	Pro	Met	Pro	Gly	Ala	Asp	Arg
			85					90					95		
Leu	Val	Lys	Arg	Leu	Ser	Gly	His	Val	Pro	Ile	Ala	Val	Val	Ser	Asn
		100						105					110		
Ser	Pro	Thr	Arg												
		115													

&lt;210&gt; 2383

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2383

acgcgtgcgt tcagatgagc gccggacgaa actcctcggt cgcttcggca ggcattggatt  
60  
catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg  
120

cagaaaacgc ccactctccc ttccccaggc gccggccgctc gagtcgtcta cgcaacgcac  
 180  
 gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc  
 240  
 gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcattctgt  
 300  
 ctttcttgat gccaccacc ttgttacata ttctgccatg caaaacacct tgtgattttt  
 360  
 ggcggagtg aacatgggtat gtgtatgcc a ctg  
 393

<210> 2384  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 2384  
 Met Leu His Ser Ala Lys Asn His Lys Val Phe Cys Met Ala Glu Tyr  
 1 5 10 15  
 Val Thr Arg Trp Val Ala Ser Arg Lys Thr Arg Cys Ile Leu Cys Asp  
 20 25 30  
 Asn Pro His Ser Val His Leu Ile Phe Arg Ala Asp Ile Glu His Ala  
 35 40 45  
 Glu Pro Ile Arg Val Arg Lys Trp Gly Tyr Glu Lys Val Thr Tyr Val  
 50 55 60  
 Asp Val Arg Cys Val Asp Asp Ser Thr Ala Gly Ala Trp Gly Arg Glu  
 65 70 75 80  
 Ser Gly Arg Phe Leu Pro His Pro Arg Arg Ile Ala Thr Arg Arg Arg  
 85 90 95  
 Ser Cys Ser Lys Ala Arg Ala Asp Met Asn Pro Cys Leu Pro Lys Arg  
 100 105 110  
 Pro Arg Ser Phe Val Arg Arg Ser Ser Glu Arg Thr Arg  
 115 120 125

<210> 2385  
 <211> 347  
 <212> DNA  
 <213> Homo sapiens

<400> 2385  
 acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggtat  
 60  
 gcactgtgct gtggactctt gttgtggggt cctaggtctg ccagcattt tggggttcac  
 120  
 cccgtgaccc tctacgggtt tccatgcccc cagcaccacg tccatcatca tttctggggt  
 180  
 cccctcacct cagagagcct gcttcctatg actgcgtggg ccagctggag aaggacgacc  
 240  
 caagaccct caagtttctg tgtcctgacc ccaagcatag gcctgagtgc tcctggggcc  
 300  
 caaggcctt tacgcactac tctctggggc ccactgtctg cactctt  
 347

<210> 2386

<211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2386  
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu  
 1 5 10 15  
 Cys Cys Gly Leu Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly  
 20 25 30  
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val  
 35 40 45  
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met  
 50 55 60  
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe  
 65 70 75 80  
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly  
 85 90 95  
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu  
 100 105

<210> 2387  
 <211> 715  
 <212> DNA  
 <213> Homo sapiens

<400> 2387  
 ncggccgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccg  
 60  
 cgccggagac agctgccgcc gcatagtaat caccgcgggg ctgggtgcgc gggggctccc  
 120  
 cgctacctgc gcgcctgctg ctcccaccac gcggcaccga cccgggcgcg ccccggccc  
 180  
 ctgtccgcag cccacagcca caccgcgcac cctacaccct ccttgcgcct ctgctgggga  
 240  
 gctcaccccc tccactcgca cagtgcgctg cggcccgggg tgtgggaggt cccgggactt  
 300  
 gggttgtgag tgcctgtgtg ggggtagggg cagggtgtccg cttgtgcgca tatgggcatg  
 360  
 agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca  
 420  
 cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg  
 480  
 tgtgcctgtg tgtccgtatt tgagtgccta caggaatgtg ggtggtaggt acccgatatg  
 540  
 ggggtgcatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta  
 600  
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt  
 660  
 gtttgagggt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag  
 715

<210> 2388  
 <211> 58  
 <212> PRT

<213> Homo sapiens

<400> 2388

```

Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1           5           10           15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
          20           25           30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
          35           40           45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
          50           55

```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```

ntcaccctgc cgccggaagg ttgctcgtac cgcattggcca tcgtcaccat gaagaagtcg
60
tatccggggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagtccatg
120
tataccaagt tcgttatcgt caccgacgac gatatacaacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggatgatgat cgataacacg
240
ccgatcgact acctcgactt cgctcgcggt gtgtccggcc tgggttcgaa gatgggggctc
300
gatcccacgc acaaattggc cgccacacc acccgn
336

```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```

Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1           5           10           15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
          20           25           30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
          35           40           45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
          50           55           60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
          65           70           75           80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
          85           90           95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
          100          105          110

```

<210> 2391

<211> 388



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2391

gtcgactaac ctgcgtacag ccgccaccct acgttttagtc gcgaagcgtg tcggctccat  
60  
gttcattccg gagctacacc atgaataaag tactacctga tccacccatc gatcccgcga  
120  
aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctaccag ggcttcact  
180  
gcgtcaacga agacctgagt ttcgaagacg ccctgctcta caccgccagc ctgctcgaca  
240  
gtgcctctgc cacggcgctg gattgcggtg agctgctgca aagccctgaa cgggcgaaga  
300  
tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcg ttccccatcg  
360  
agtgcctgac cgcaccaaag ccctgcct  
388

&lt;210&gt; 2392

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2392

Met	Asn	Lys	Val	Leu	Pro	Asp	Pro	Pro	Ile	Asp	Pro	Ala	Lys	Asp	Arg
1				5					10					15	
Val	Ala	Phe	Asn	Arg	Ala	Ile	Asp	His	Tyr	Leu	Pro	Thr	Gln	Gly	Phe
			20					25					30		
His	Cys	Val	Asn	Glu	Asp	Leu	Ser	Phe	Glu	Asp	Ala	Leu	Leu	Tyr	Thr
		35					40					45			
Ala	Ser	Leu	Leu	Asp	Ser	Ala	Ser	Ala	Thr	Ala	Leu	Asp	Cys	Gly	Glu
	50					55					60				
Leu	Leu	Gln	Ser	Pro	Glu	Arg	Ala	Lys	Ile	Leu	Ala	Val	Trp	His	Leu
65					70					75				80	
Leu	Glu	Ile	Ala	Lys	Thr	Thr	Val	Asp	Arg	Phe	Pro	Ile	Glu	Cys	Leu
			85					90						95	
Thr	Ala	Pro	Lys	Pro	Cys										
			100												

&lt;210&gt; 2393

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2393

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgctc tgagtccggc  
60  
atggtcaccg accccatcac tgcgcgcccc gatatgacca tcggggaagt agacgcgctg  
120  
tgcgcccgt tccgcatctc cggcctgccg gtggtagacg aggacggcac cctgatgggc  
180  
atttgacca cccgcgatat gcgcttcgag cctgactttg accgcaaggc cagcgaggtc  
240

atgacggcta tgccgcttgt tgttgcgcg c gaggggtgtat ctaagaagga agccctcgaa  
 300  
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgtcg atgcggataa taagctcacc  
 360  
 ggccctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g  
 411

<210> 2394  
 <211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 2394  
 Asn Leu Ser Thr Glu Asp Gln Ala Glu Gln Val Glu Ile Val Lys Arg  
 1 5 10 15  
 Ser Glu Ser Gly Met Val Thr Asp Pro Ile Thr Ala Arg Pro Asp Met  
 20 25 30  
 Thr Ile Gly Glu Val Asp Ala Leu Cys Ala Arg Phe Arg Ile Ser Gly  
 35 40 45  
 Leu Pro Val Val Asp Glu Asp Gly Thr Leu Met Gly Ile Cys Thr Thr  
 50 55 60  
 Arg Asp Met Arg Phe Glu Pro Asp Phe Asp Arg Lys Val Ser Glu Val  
 65 70 75 80  
 Met Thr Ala Met Pro Leu Val Val Ala Arg Glu Gly Val Ser Lys Lys  
 85 90 95  
 Glu Ala Leu Glu Leu Leu Ser Ala Asn Lys Val Glu Lys Leu Pro Ile  
 100 105 110  
 Val Asp Ala Asp Asn Lys Leu Thr Gly Leu Ile Thr Val Lys Asp Phe  
 115 120 125  
 Val Lys Thr Glu Gln Tyr Pro Asn Ala  
 130 135

<210> 2395  
 <211> 362  
 <212> DNA  
 <213> Homo sapiens

<400> 2395  
 aagctttcag aggagtttgc taaagtgtta aggatttgca tattttcaac tttagtcata  
 60  
 tctaagtgcc ccaataaaac agcgcgggcg attgggggct ggctttcatc aacaactaac  
 120  
 ttagcaatat taatctgacc ttttcctggt gattgggcat ttagtaataa tgcggggcca  
 180  
 atatcatcat actttccaaa tatttttgat tttttagaca tcaactgaag ttgtgaccat  
 240  
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt  
 300  
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc  
 360  
 gt  
 362

<210> 2396

```

<400> 2398
Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro
 1          5          10          15
Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

```

			20					25					30				
Gln	Thr	Ser	Lys	Thr	Lys	Ala	Arg	Glu	Thr	Arg	Thr	Leu	Thr	Trp	Val		
		35					40					45					
Thr	Ile	Pro	His	Ala	Gly	Ile	Val	Ile	Ser	Asp	Thr	His	Leu	Asp	Thr		
	50					55					60						
Pro	Arg	Ser	Ile	Asn	Thr	Ser	Thr	Ile	Gly	Met							
65					70				75								

<210> 2399  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

<400> 2399  
 acgcgtcatg cttcacgaaa cgggtcacgc gcttcattac caagcagctg gcaaacacaa  
 60  
 cttgtatttc gagcggggtg cgccagtcga gatcatggag ttcgtggcct actgcttgca  
 120  
 gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaag aacaggaact  
 180  
 agtcaaacc tttgctggtc cggccaggct tggagggggt cgaaaaccta caacgccaca  
 240  
 aaacggttcc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat  
 300  
 accgtatggc ttgagatgcg acacacgctc ggggtggatt ggtc  
 344

<210> 2400  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

Met	Leu	His	Glu	Thr	Gly	His	Ala	Leu	His	Tyr	Gln	Ala	Ala	Gly	Lys		
1				5					10					15			
His	Asn	Leu	Tyr	Phe	Glu	Arg	Val	Ala	Pro	Val	Glu	Ile	Met	Glu	Phe		
		20					25					30					
Val	Ala	Tyr	Cys	Leu	Gln	Phe	Leu	Thr	Ile	Glu	Arg	Leu	Ala	Met	Ser		
	35					40					45						
Gly	Glu	Leu	Ser	Gly	Lys	Glu	Gln	Glu	Leu	Val	Lys	Pro	Phe	Ala	Gly		
	50				55					60							
Pro	Ala	Arg	Leu	Gly	Gly	Val	Arg	Lys	Pro	Thr	Thr	Pro	Gln	Asn	Gly		
65				70					75					80			
Ser	Ser	Thr	Gly	Phe	Ile	Asn	Ser	Leu	Lys	Ser	Arg	Gln	Val	Lys	Asn		
		85				90					95						
Ser	Ile	Pro	Tyr	Gly	Leu	Arg	Cys	Asp	Thr	Arg	Ser	Gly	Trp	Ile	Gly		
		100				105						110					

<210> 2401  
 <211> 479  
 <212> DNA  
 <213> Homo sapiens

<400> 2401

nntaccgagg taaaactcga tagcctcggg gtcaccgacc agatgcgctc tgggcgctgc  
 60  
 tggatgtttg ccgcgctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat  
 120  
 gactttgagt tttcctttac ctacctgcag tacttcgaca aactagagcg cgccaacttc  
 180  
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg  
 240  
 gctacttccc tcgagctcac aggcgacgac ggcggctggg ggatcattttt caccaacctc  
 300  
 gtggacaagt acggcgagct cccggccgag gtcatgcctg aggtgcactc gtccggccac  
 360  
 accgaccaga tgaatcgca tatcgccacc atcatccgcc gcgccgcgca ccgtgcggtg  
 420  
 gaaggcgagg gggatcgcg gggcatcgtc aagcaagccc gcccgatat ccaacgcgt  
 479

<210> 2402  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 2402  
 Xaa Thr Glu Val Lys Leu Asp Ser Leu Gly Val Thr Asp Gln Met Arg  
 1 5 10 15  
 Ser Gly Arg Cys Trp Met Phe Ala Ala Leu Asn Val Phe Arg His Arg  
 20 25 30  
 Ala Ala Lys Glu Leu Asn Ile Asp Asp Phe Glu Phe Ser Phe Thr Tyr  
 35 40 45  
 Leu Gln Tyr Phe Asp Lys Leu Glu Arg Ala Asn Phe Ala Leu Asn Gln  
 50 55 60  
 Leu Leu Asp Leu Thr Glu Asp Gly Thr Asp Trp Asp Asp Arg Asp Val  
 65 70 75 80  
 Ala Thr Ser Leu Glu Leu Thr Gly Asp Asp Gly Gly Trp Trp Ser Phe  
 85 90 95  
 Phe Thr Asn Leu Val Asp Lys Tyr Gly Ala Val Pro Ala Glu Val Met  
 100 105 110  
 Pro Glu Val His Ser Ser Gly His Thr Asp Gln Met Asn Arg Asp Ile  
 115 120 125  
 Ala Thr Ile Ile Arg Arg Ala Ala His Arg Ala Val Glu Gly Glu Gly  
 130 135 140  
 Asp Arg Gly Gly Ile Val Lys Gln Ala Arg Pro Asp Ile Gln Arg  
 145 150 155

<210> 2403  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2403  
 ntcataaacg gcgataaccc gctggactcg tctgcgggttc acccggaagc ctaccgctg  
 60  
 gtgcagcgta ttgccgccga gaccggccgt gatatccggt cgctgatcgg tgacgccgcg  
 120

ttcctcaagc gcctggaccc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc  
 180  
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtcccga gttcaagacc  
 240  
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa  
 300  
 ggcgtggtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcatcaggac  
 360  
 ggtttggtgc acatctctgc acttttcg  
 387

<210> 2404

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2404

Xaa	Met	Asn	Gly	Asp	Asn	Pro	Leu	Asp	Ser	Ser	Ala	Val	His	Pro	Glu
1			5					10						15	
Ala	Tyr	Pro	Leu	Val	Gln	Arg	Ile	Ala	Ala	Glu	Thr	Gly	Arg	Asp	Ile
			20					25					30		
Arg	Ser	Leu	Ile	Gly	Asp	Ala	Ala	Phe	Leu	Lys	Arg	Leu	Asp	Pro	Lys
		35				40						45			
Lys	Tyr	Thr	Asp	Glu	Thr	Phe	Gly	Val	Pro	Thr	Ile	Thr	Asp	Ile	Leu
	50				55						60				
Gln	Glu	Leu	Glu	Lys	Pro	Gly	Arg	Asp	Pro	Arg	Pro	Glu	Phe	Lys	Thr
65					70				75					80	
Ala	Glu	Phe	Gln	Asp	Gly	Val	Glu	Asp	Leu	Lys	Asp	Leu	Gln	Pro	Gly
			85					90					95		
Met	Ile	Leu	Glu	Gly	Val	Val	Thr	Asn	Val	Thr	Asn	Phe	Gly	Ala	Phe
		100						105					110		
Val	Asp	Ile	Gly	Val	His	Gln	Asp	Gly	Leu	Val	His	Ile	Ser	Ala	Leu
		115					120					125			

Ser

<210> 2405

<211> 859

<212> DNA

<213> Homo sapiens

<400> 2405

ttgcaagtaa catcaaaagt catctacaga agcaaaagac aaaaaggccc ctccacctgc  
 60  
 aaattaaatg gaataatttg ctttatgaga agctcaccat tgggggtcatt cttatttttt  
 120  
 ctcaactccac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag  
 180  
 ccttcacttc tcccctggca atgcctggcc acctgacacc tggcctccct cctctttcca  
 240  
 gcaatcctgg taccaacgaa tggtcacca ccacccaccc caatgcccag accgcagacc  
 300  
 tgcattcctc ccatctcaca gcccacaaac caaacggta ttcattctac ctcccattct  
 360

actcctcagc aatttcttcc accgtagact ctggttaatt ggactgactg aagcccaggg  
 420  
 gtcagtttct gtcctaagag cgctccaggt ggctgcaccc tgtgcccaga gccaggcccc  
 480  
 ctgctatagg ctcgctgcac tccccctgca ggtgctgggg acaccgcaac cctcctcctg  
 540  
 gggacaccta cttgcctttg caggccctcg ggggtcactt ctcccaggaa gccgcctctg  
 600  
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg  
 660  
 tccactgtct tcaccaatta caccatgagc tccacagact ccaggacat ggcttctacc  
 720  
 tctcagttcc cagtgctagc tatggggccc agcacacagg gaacagcagt tcaattaccc  
 780  
 agttcactga agggcagacc tgggatcata caggagcaa ggaagcttga gccccttcag  
 840  
 gagaagggga agaacgcgt  
 859

<210> 2406  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 2406  
 Met Asp Arg His Leu Val Ser Leu His Leu Ser Pro Gly Asn Ala Trp  
 1 5 10 15  
 Pro Pro Asp Thr Trp Pro Pro Ser Ser Phe Gln Gln Ser Trp Tyr Gln  
 20 25 30  
 Arg Met Ala His His His Pro Pro Gln Cys Pro Asp Arg Arg Pro Ala  
 35 40 45  
 Phe Leu Pro Ser His Ser Pro Lys Ser Lys Pro Leu Phe Ile Leu Pro  
 50 55 60  
 Pro Ile Leu Leu Leu Thr Asn Phe Phe His Arg Arg Leu Trp Leu Ile  
 65 70 75 80  
 Gly Leu Thr Glu Ala Gln Gly Ser Val Ser Val Leu Arg Ala Leu Gln  
 85 90 95  
 Val Ala Ala Pro Cys Ala Gln Ser Gln Ala Pro Cys Tyr Arg Leu Ala  
 100 105 110  
 Ala Leu Pro Leu Gln Val Leu Gly Thr Pro Gln Pro Ser Ser Trp Gly  
 115 120 125  
 His Leu Leu Ala Phe Ala Gly Pro Arg Gly Ser Leu Leu Pro Gly Ser  
 130 135 140  
 Arg Leu Trp Val Arg  
 145

<210> 2407  
 <211> 303  
 <212> DNA  
 <213> Homo sapiens

<400> 2407  
 nacgcgtggc ttatcttcag catggtgatc gcgattgggt tagccgttat ggctgcggtc  
 60

gtattcatcg agcaaggcca gcgacgtatc ccggtgcagt acgccaagcg gatggtgggg  
120  
cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt  
180  
atcccgggtca tctttgcctc gtcgatcctg taccttccgg tgctctacgc aactttccgg  
240  
ccgcagacgt ccgcggcaaa gtggatcggc cactacttca cgcgcgggtga ccatccgggtg  
300  
tac  
303

<210> 2408  
<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2408  
Xaa Ala Trp Phe Ile Phe Ser Met Val Ile Ala Ile Gly Leu Ala Val  
1 5 10 15  
Met Ala Ala Val Val Phe Ile Glu Gln Gly Gln Arg Arg Ile Pro Val  
20 25 30  
Gln Tyr Ala Lys Arg Met Val Gly Arg Arg Met Phe Gly Gly Ser Thr  
35 40 45  
Thr Tyr Ile Pro Leu Lys Val Asn Gln Ser Gly Val Ile Pro Val Ile  
50 55 60  
Phe Ala Ser Ser Ile Leu Tyr Leu Pro Val Leu Tyr Ala Thr Phe Arg  
65 70 75 80  
Pro Gln Thr Ser Ala Ala Lys Trp Ile Gly His Tyr Phe Thr Arg Gly  
85 90 95  
Asp His Pro Val Tyr  
100

<210> 2409  
<211> 322  
<212> DNA  
<213> Homo sapiens

<400> 2409  
ccatgggtttc aagcccccat tgtgtcagcc cagagagcaa ctggagaccc tctgacacca  
60  
cctcccggcc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt  
120  
cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc  
180  
tcggccccgac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccaggtggg  
240  
ccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga  
300  
gggacatgag tgtcagtgtg gg  
322

<210> 2410  
<211> 106  
<212> PRT



<213> Homo sapiens

<400> 2410

```

Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1           5           10           15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
           20           25           30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
           35           40           45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
           50           55           60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
65           70           75           80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
           85           90           95
Asp Leu Val Arg Asp Met Ser Val Ser Val
           100           105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

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ccatgggctg ggtgctggag acacgagatc aggcaggccc tgcccctggg gctcattcta
60
gggtctgcgg cagacagggg gacagagggg gctgtgagag ccctgaggct gagtggcttt
120
ctggggaagc accatcccta gggacctccg cggtcggtca gtggccgctg ctgtcggtgt
180
gcagagcaga ggctggggcg agagtgggtca gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggct tgtggctggc aagaggggtg catgcacgtc gctgaaaggc
300
aggcctgggc ccgaggcctg ggtgtgggga cgctgagga gactgtacag tgtggagtcg
360
ggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1           5           10           15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
           20           25           30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
           35           40           45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
           50           55           60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

65		70		75		80									
Gly	Gly	Trp	Arg	Leu	Ala	Cys	Gly	Trp	Gln	Glu	Gly	Gly	Met	His	Val
				85					90					95	
Ala	Glu	Arg	Gln	Ala	Trp	Ala	Arg	Gly	Leu	Gly	Val	Gly	Thr	Pro	Glu
			100					105					110		
Glu	Thr	Val	Gln	Cys	Gly	Val	Gly	Gly	Ala	Ala					
		115						120							

&lt;210&gt; 2413

&lt;211&gt; 784

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2413

```

cccgggagag ttgggcgggg caggggtgtt catggcatac tcgggattgt gtcatttggt
60
gtggctggat ttagggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct
120
taggtctact gaggaattgg ggttcttcct gaagagcatg gagcccttgg aggacctcca
180
cagcaggcag agagacggca gcctcctggg atctgattgc ccagcccccac ttacacaggt
240
ggctgaggtg agctcttccc atggagtgca tccttcttga tcagcctgag gagagcaggg
300
ccccaccatc ctgcacctgg tgcagaaaaa ccctgtgaag ctgcactaca gaaagacacc
360
accaggtggc aggccctggag attgcatgga ggccccgccc cccccaacca attctttgat
420
aatagcacag tgttgaagag agggggccat aaaagactga atccctgttc atgccaggct
480
ggctctgccc aacatatatg agactgcaag ttctgccact gtgggctgtg taccacaag
540
ccacaggtcc ctctgaacct gtgaatcagg tcttgggagc tattcgagca ggctggattt
600
tctcctctgc ctcgggggac ctgagagtaa gttacagact tcatgaccct tcaccccaaa
660
acacttgagt atgtatcacc taagaacaag ggcattctcc tgtagaacca caatgcaatt
720
tgcaagttca ggaaatttaa ctgatacaat actattatct aattacggag agaagacaac
780
gcgt
784

```

&lt;210&gt; 2414

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2414

Met	Lys	Ser	Val	Thr	Tyr	Ser	Gln	Val	Pro	Arg	Gly	Arg	Gly	Glu	Asn
1				5					10					15	
Pro	Ala	Cys	Ser	Asn	Ser	Ser	Gln	Asp	Leu	Ile	His	Arg	Phe	Arg	Gly
			20				25					30			
Thr	Cys	Gly	Leu	Trp	Val	His	Ser	Pro	Gln	Trp	Gln	Asn	Leu	Gln	Ser

```

      35              40              45
His Ile Cys Trp Ala Glu Pro Ala Trp His Glu Gln Gly Phe Ser Leu
      50              55              60
Leu Trp Pro Pro Leu Phe Asn Thr Val Leu Leu Ser Lys Asn Trp Leu
65              70              75              80
Gly Gly Ala Gly Pro Pro Cys Asn Leu Gln Ala Cys His Leu Val Val
      85              90              95
Ser Phe Cys Ser Ala Ala Ser Gln Gly Phe Ser Ala Pro Gly Ala Gly
      100             105             110
Trp Trp Gly Pro Ala Leu Leu Arg Leu Ile Arg Lys Asp Ala Leu His
      115             120             125
Gly Lys Ser Ser Pro Gln Pro Pro Val
      130             135

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&lt;210&gt; 2415

&lt;211&gt; 2164

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2415

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420
cacatctccc tgcagtctga gcctgtggtg accgatgcgt tcctggccgt ggctggccac
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780
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840
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900
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1020

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ctctgtgat ctctgtgttt tcccttttct ttctggggcc aggaagtcag ggtcaactcc  
 1080  
 caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc  
 1140  
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca  
 1200  
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 1260  
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 1380  
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 1440  
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 1560  
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 1680  
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 1800  
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 1860  
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 1920  
 ggctggacat ggggcagtcg ttctggggag gcctggccta gcagccacc acctgagccc  
 1980  
 tcccgccag gcttcgtgct ggggtgggccc atgtgccagg acaggagggt cccggcggaa  
 2040  
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 2160  
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 2164

<210> 2416  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens

<400> 2416  
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 1 5 10 15  
 Ala Phe Asp Arg Trp Pro Thr Asp Lys Glu Leu Val Ala Gln Ala Lys  
 20 25 30  
 Ala Leu Gly Arg Glu Tyr Val His Ala Arg Leu Leu Arg Ala Gly Leu  
 35 40 45  
 Ser Trp Ser Ala Pro Glu Arg Ala Ser Pro Ala Pro Gly Gly Arg Leu

```

      50      55      60
Ala Glu Val Cys Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met
65      70      75      80
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser
      85      90      95
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly
      100      105      110
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr
      115      120      125
Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro
      130      135      140
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys
145      150      155      160
Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu
      165      170      175
Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val
      180      185      190
Ala Ala Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val
      195      200      205
Leu Leu Pro Glu Arg
      210

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<210> 2417  
 <211> 615  
 <212> DNA  
 <213> Homo sapiens

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<400> 2417
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120
cagttgtag ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt
180
acgttttttc acaactgtga tccacgccac agttgcaaat aatcaacata gaaaaattaa
240
ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga
300
gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgaggagaa
360
aaatccacaa atccttttgc tttcaaacat tatgatgcta atcaagtaat tttaggtaaa
420
actatggctg aacatttacg cttaacggtg tgttattggc ataccttttg ctggaatggg
480
aatgatatgt ttgggctagg ttctttggaa cgaagtggc agaaaaattc aaatttgctt
540
gctggcgcag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct
600
tattattggt ttcatt
615

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<210> 2418  
 <211> 101  
 <212> PRT

<213> Homo sapiens

<400> 2418

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Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
          20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
          35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
          50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
          85           90           95
Tyr Tyr Cys Phe His
          100

```

<210> 2419

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2419

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aaattttcag aagtcctggg gttgcgcggg caaacaggga ccgaggaggg acgaccgcct
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ccccgtgacg ctgcttcttc ttcttgcttg cagctgaggg gtctgttttg tgctgcttcc
120
gctccttcct cacgtacaca gggggcagct tagcctctgg gatgggagtg gcttcataca
180
tgagacacat gcccagatcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccac cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgcgt
318

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<210> 2420

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2420

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Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
          20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
          35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
          50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

```

85 90 95

Lys Ile

<210> 2421  
<211> 420  
<212> DNA  
<213> Homo sapiens

<400> 2421  
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tactggttgt ttgacagtgc agggcttgtg cacagacgtg agccacaggg cagcacaacg  
120  
ctgtcgcaag tctgagtagg gattatcatg acggatacaa cttcagcccc gcgttacgcg  
180  
ctgcgtgggc tacagcttat tggctggcgt gacatgcaac acgcgctgga tttcctgttc  
240  
gcggacgggc agatgaaatc gggcacgctg gtggccatca acgcagaaaa gatgctggcg  
300  
gttgaagata atgcggaagt gaaaagcctg attgaagccg cggagttaa ataccggcc  
360  
ggtattagcg tagtgcgttc aattcgtaaa aagttcccc acgctggagt gtgctcgca  
420

<210> 2422  
<211> 91  
<212> PRT  
<213> Homo sapiens

<400> 2422  
Met Thr Asp Thr Thr Ser Ala Pro Arg Tyr Ala Leu Arg Gly Leu Gln  
1 5 10 15  
Leu Ile Gly Trp Arg Asp Met Gln His Ala Leu Asp Phe Leu Phe Ala  
20 25 30  
Asp Gly Gln Met Lys Ser Gly Thr Leu Val Ala Ile Asn Ala Glu Lys  
35 40 45  
Met Leu Ala Val Glu Asp Asn Ala Glu Val Lys Ser Leu Ile Glu Ala  
50 55 60  
Ala Glu Phe Lys Tyr Pro Ala Gly Ile Ser Val Val Arg Ser Ile Arg  
65 70 75 80  
Lys Lys Phe Pro His Ala Gly Val Cys Ser Arg  
85 90

<210> 2423  
<211> 371  
<212> DNA  
<213> Homo sapiens

<400> 2423  
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gagctcaacg ccaagcacia gaagarattg gaaggctctc tacggcatcc tgagaataga  
120

gaatgcgcag actgcaagtc aaagggctcct cgatgggcaa gtgtgaatct aggtatcttt  
 180  
 atatgcatga catgttctgg cattcataga agcctggggg tgcacatatc taaggtaaga  
 240  
 tctgccaccc tggatacatg gctgccagag caagttgcat ttattcaatc aatgggaaac  
 300  
 gaaaaagcaa atagctattg ggaagcagag ctgcctccta actacgatag gggtggaata  
 360  
 gagaatttga t  
 371

<210> 2424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2424

Met	Asn	Glu	Lys	Ala	Ser	Val	Ser	Lys	Glu	Leu	Asn	Ala	Lys	His	Lys
1				5					10					15	
Lys	Ile	Leu	Glu	Gly	Leu	Leu	Arg	His	Pro	Glu	Asn	Arg	Glu	Cys	Ala
			20					25					30		
Asp	Cys	Lys	Ser	Lys	Gly	Pro	Arg	Trp	Ala	Ser	Val	Asn	Leu	Gly	Ile
		35					40					45			
Phe	Ile	Cys	Met	Thr	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly	Val	His
	50					55					60				
Ile	Ser	Lys	Val	Arg	Ser	Ala	Thr	Leu	Asp	Thr	Trp	Leu	Pro	Glu	Gln
65					70				75					80	
Val	Ala	Phe	Ile	Gln	Ser	Met	Gly	Asn	Glu	Lys	Ala	Asn	Ser	Tyr	Trp
			85					90					95		
Glu	Ala	Glu	Leu	Pro	Pro	Asn	Tyr	Asp	Arg	Val	Gly	Ile	Glu	Asn	Leu
			100					105					110		

<210> 2425

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2425

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 cccgtcctga acggctacga gatgaccgcg cgctgcgcg aacatgaagc cncgccatg  
 120  
 acctcccggc ctgcacgggg gtctcggtttc accgcccacg cccagcccga ggaacgcccc  
 180  
 cgctgcaagg aagccggcat gaacgactgc ctgttcaagc ccatcagcct gaccaccctc  
 240  
 aaccagaaac tcgccgacgt cacgccgcgc ccgcgtccga gccaggccgc cttcagcctc  
 300  
 gacggcctgc acgccctgac cgggggcgag ccgctgctga tgcgtcgctt gatcgacgag  
 360  
 ctgctgagca gttgccaggc ggcccgcgag gcactgctcg gactgcccac c  
 411

<210> 2426



<211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 2426  
 Thr Gly Leu Gln Ala Trp Lys Asp Gly His Phe Asp Leu Val Ile Val  
 1 5 10 15  
 Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu  
 20 25 30  
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe  
 35 40 45  
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu  
 50 55 60  
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu  
 65 70 75 80  
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala  
 85 90 95  
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu  
 100 105 110  
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala  
 115 120 125  
 Arg Glu Ala Leu Leu Gly Leu Pro Ile  
 130 135

<210> 2427  
 <211> 293  
 <212> DNA  
 <213> Homo sapiens

<400> 2427  
 cataacaaag gcttagggat tttggtgccc tgtgcaattt tggcagcttt tctgttgatt  
 60  
 tggagcgtaa aatgttgcag agcccagcta gaagccagga ggagcagaca ccctgctgat  
 120  
 ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtcccag tgcacccgat  
 180  
 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac  
 240  
 aactcatgac ctgcacccctt aatatccagt gacttcacat ccccttcacg cgt  
 293

<210> 2428  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 2428  
 His Asn Lys Gly Leu Gly Ile Leu Val Pro Cys Ala Ile Xaa Ala Ala  
 1 5 10 15  
 Phe Leu Leu Ile Trp Ser Val Lys Cys Cys Arg Ala Gln Leu Glu Ala  
 20 25 30  
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys  
 35 40 45  
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

50 55 60  
Asn Val Pro Leu Ser Gly Lys Val  
65 70

<210> 2429  
<211> 428  
<212> DNA  
<213> Homo sapiens

<400> 2429  
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atcgccgaga tggcggggct acaggctgct cagtcgatcc gggaatcctt gaacaaggct  
120  
gatgtcctgc tcaatgggggt agagacgtcg accgggtccgc agccgggtgc gcttgctttg  
180  
ctggaacagg ccgtacatga gctggatggc actggggatg ctgacccctc cgccgctgag  
240  
ttggctgagc gcgcccgcc gatgtcgtat gacctcactg acctcgctgc ttcggtcgct  
300  
ggccatgcgg ctcgggctga agctgatccg caacggcttg aggaattggg gggtcgtttg  
360  
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420  
actgcggc  
428

<210> 2430  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 2430  
Ser Arg Arg Val Gly Glu Val Asp Ala Val Asp Pro Lys Pro His Glu  
1 5 10 15  
Asp Asp Asp Leu Ile Ala Glu Met Ala Gly Leu Gln Ala Ala Gln Ser  
20 25 30  
Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu  
35 40 45  
Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala  
50 55 60  
Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu  
65 70 75 80  
Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala  
85 90 95  
Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg  
100 105 110  
Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg  
115 120 125  
Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala  
130 135 140

<210> 2431  
<211> 409

<212> DNA

<213> Homo sapiens

<400> 2431

nnacgcgtta acaattaaag cattaacgcc agatgaatgg caaaaacaaa aacattttat  
60  
atagtcgggtt aaatagggat tttcatgggt caatttatta ttcaagggtg ctgccagtta  
120  
aatggcgagg taacaatttc tggggcaaaa aatgccgcat taccaatcct atttgctact  
180  
ttattatctg agggtgatat caatttaagc aatgtaccgc ttttaaaga tattgccacc  
240  
actatcgagt tgttaaaga gctgggtgct actgctactc agactcaaca ctgcgtgcat  
300  
attaatgcga aagaagttaa gaactatact gcttcttatg aattagtgag aagtatgcgt  
360  
gcttcaattt tggcattagg tccattgggt gctcgggttc gtgaagctt  
409

<210> 2432

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2432

Met	Gly	Gln	Phe	Ile	Ile	Gln	Gly	Gly	Cys	Gln	Leu	Asn	Gly	Glu	Val
1				5					10					15	
Thr	Ile	Ser	Gly	Ala	Lys	Asn	Ala	Ala	Leu	Pro	Ile	Leu	Phe	Ala	Thr
			20					25					30		
Leu	Leu	Ser	Glu	Gly	Asp	Ile	Asn	Leu	Ser	Asn	Val	Pro	Leu	Leu	Lys
		35					40					45			
Asp	Ile	Ala	Thr	Thr	Ile	Glu	Leu	Leu	Lys	Glu	Leu	Gly	Ala	Thr	Ala
	50					55					60				
Thr	Gln	Thr	Gln	His	Cys	Val	His	Ile	Asn	Ala	Lys	Glu	Val	Lys	Asn
65				70					75					80	
Tyr	Thr	Ala	Ser	Tyr	Glu	Leu	Val	Arg	Ser	Met	Arg	Ala	Ser	Ile	Leu
			85					90					95		
Ala	Leu	Gly	Pro	Leu	Val	Ala	Arg	Phe	Gly	Glu	Ala				
		100						105							

<210> 2433

<211> 655

<212> DNA

<213> Homo sapiens

<400> 2433

caattgccta caatattcag tacagtcaca tgctgcatag gtttgcagtc tagaaacaac  
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aggctacacc acacagccga ggcgtgtgga ggactatacc atctggggtt acgtaagtgc  
120  
gctctatgat gctcacgtaa caatgaaatc acggaatctc tctctcagaa catttccccg  
180  
ttgtgaagca gcacgtgact ataatctttt cccagggtta cccctgaagt tcaagtgcaa  
240

tgccccctgca cagcacagag caggggacga taggaggcgt gccttctcca gctgaaccac  
 300  
 cgggccagcc gggcgggcag tgggggttgg ggggagggtt gacccattgg tgctgccacg  
 360  
 accaaagaga caggatcttg gagagagtga ggcctctgtg caggggacga tgaaggccca  
 420  
 atctggggac atcagggaaa gcagcaaggg tctggctgat tgtgcaaaaa gaactttttc  
 480  
 tgtgactgcc gtgttccaaa cacacccttt gcttttacia aaacccaaac tgggagggtt  
 540  
 agcaaaaggc acagtttcag agcataataa agacagagca gaatgggaga ggaggttaat  
 600  
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 655

<210> 2434  
 <211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 2434  
 Met Ala His Leu Ile Asn Leu Leu Ser His Ser Ala Leu Ser Leu Leu  
 1 5 10 15  
 Cys Ser Glu Thr Val Pro Phe Ala Lys Pro Pro Ser Leu Gly Phe Cys  
 20 25 30  
 Lys Ser Lys Gly Cys Val Trp Asn Thr Ala Val Thr Glu Lys Val Leu  
 35 40 45  
 Phe Ala Gln Ser Ala Arg Pro Leu Leu Leu Ser Leu Met Ser Pro Asp  
 50 55 60  
 Trp Ala Phe Ile Val Pro Cys Thr Glu Ala Ser Leu Ser Pro Arg Ser  
 65 70 75 80  
 Cys Leu Phe Gly Arg Gly Ser Thr Asn Gly Ser Thr Leu Pro Pro Thr  
 85 90 95  
 Pro Thr Ala Arg Pro Ala Gly Pro Val Val Gln Leu Glu Lys Ala Arg  
 100 105 110  
 Leu Leu Ser Ser Pro Ala Leu Cys Cys Ala Gly Ala Leu His Leu Asn  
 115 120 125  
 Phe Arg Gly Lys Pro Gly Lys Arg Leu  
 130 135

<210> 2435  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<400> 2435  
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 60  
 aacgtgctgc gtacctccat ggaactgggc ngcaatgcc cattcattgt ctttgaggac  
 120  
 gcagatattg accaagcggc ccagggtgcg atgggcgcca agatgcgcaa tatcggcgag  
 180  
 gcctgcaccg cagctaaccg cttcttggtc cagagctctg ttgctgagga gttctctgag  
 240

aaactcgttg cggagtttga gaagctcaat ctgggcaatg gstatggacga aggtattacc  
 300  
 tgcggacctc tcgtcgagtc caaggctttg gagagcattg cggcattggg ggacgatgct  
 360  
 gcagaaaagg gcgctaccat ctccaccggc ggtaagcgcg c  
 401

<210> 2436  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 2436  
 Lys Leu Ser Phe Thr Gly Ser Thr Pro Val Gly Arg Thr Leu Leu Lys  
 1 5 10 15  
 Xaa Ala Ala Asp Asn Val Leu Arg Thr Ser Met Glu Leu Gly Xaa Asn  
 20 25 30  
 Ala Pro Phe Ile Val Phe Glu Asp Ala Asp Ile Asp Gln Ala Val Gln  
 35 40 45  
 Gly Ala Met Gly Ala Lys Met Arg Asn Ile Gly Glu Ala Cys Thr Ala  
 50 55 60  
 Ala Asn Arg Phe Leu Val His Glu Ser Val Ala Glu Glu Phe Ser Glu  
 65 70 75 80  
 Lys Leu Val Ala Glu Phe Glu Lys Leu Asn Leu Gly Asn Gly Met Asp  
 85 90 95  
 Glu Gly Ile Thr Cys Gly Pro Leu Val Glu Ser Lys Ala Leu Glu Ser  
 100 105 110  
 Ile Ala Ala Leu Val Asp Asp Ala Ala Glu Lys Gly Ala Thr Ile Ser  
 115 120 125  
 Thr Gly Gly Lys Arg  
 130

<210> 2437  
 <211> 449  
 <212> DNA  
 <213> Homo sapiens

<400> 2437  
 aagcttagta ccaaaaagaa aacaaaaaca aaaacaaaac aaaccccccc cccacagag  
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 taaaataacg gaaaaagatc tactatgcta gcactaaca aataatacgt agttatgaaa  
 120  
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Gln	Cys	Leu	Thr	Tyr	Glu	Gln	Ile	Thr	Gly	Trp	Trp	Tyr	Ser	Val	Arg
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&lt;400&gt; 2441

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 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 145 150 155 160  
 Lys Lys Lys Lys Lys Lys Lys Lys  
 165

<210> 2443  
 <211> 361  
 <212> DNA  
 <213> Homo sapiens

<400> 2443  
 nccgtgcgcg ctatcttgcg tcgtacgccg tccaggggaag atgaaaaaat gctacaaacg  
 60  
 gccgatggac gattgcgcat tgatatcgaa tccatgcgca cctttgtaga gggcaaagaa  
 120  
 gtccatttga cgaaaaacga atttttaatt gtgcagactt tgtttacgca cccaataag  
 180  
 atctatacgc gcgatgaaat tatcgaagtc accttcggaa tggattatga ggcctttgac  
 240  
 cgtgccattg atacccatat caaaaacatt cgccagaaga ttgaagcgga tccgaaaaac  
 300  
 cccgtctata tccgcacggt ttatggtgtc gggtatctgc ccggaggctt tgatgaagct  
 360  
 t  
 361

<210> 2444  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2444

```

Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys
 1           5           10          15
Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met
          20          25          30
Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe
          35          40          45
Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
          50          55          60
Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
65          70          75          80
Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
          85          90          95
Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr
          100         105         110
Leu Pro Gly Gly Phe Asp Glu Ala
          115         120

```

&lt;210&gt; 2445

&lt;211&gt; 403

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2445

```

agatctgttg aatgaagcag gtgccactta gacattcact tcactgactc caaccacaac
60
ctcccccttca tttgatatcc tgctcttggc agaaggatgg agaaagagca tcgcacaaag
120
aggaagcatg tttatcctgt tcagattact gcttctgccca ggctgctgct gctgttgggt
180
tctgcacatt tgctctttat taagcaaattg tcagagctgg gtgctggcaa gggaatcccc
240
tgtatttaca caggtaaacc tgagagccag agggcccca accatcctgg ctgcgaggga
300
caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata
360
aataaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan
403

```

&lt;210&gt; 2446

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2446

```

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln
 1           5           10          15
Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Leu Gly Ser Ala His Leu
          20          25          30
Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro
          35          40          45
Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
          50          55          60
Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

```

```

<400> 2448
Xaa Ala Ser Arg Phe Ala Ser His Gly Leu Arg Val Gly Gln Val Leu
 1          5          10          15
Leu Thr Val Asn Asp Leu Val Arg Pro Thr Ser Tyr Arg Asn Ala Trp
          20          25          30
Ser Thr Leu Asp Thr Leu Leu Gly Leu Gly Val Val Pro Ile Val Asn
          35          40          45
Glu Asn Asp Thr Val Ala Thr Gly Glu Ile Arg Phe Gly Asp Asn Asp
          50          55          60
Arg Leu Ala Ala Leu Val Ala Glu Leu Val Arg Ala Gln Ala Leu Ile

```



```

65          70          75          80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
      85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100         105         110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115         120         125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130         135         140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
145         150         155         160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165         170         175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180         185         190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195         200         205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210         215         220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
225         230         235         240
Ser His Asp Glu Val Arg Val Met
      245

```

&lt;210&gt; 2449

&lt;211&gt; 296

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2449

```

gtgcactttg ttacagccct ggaacatgaa cacatgccgt catcaactcc ccaaaatctc
60
ctactgctct cccctcctcc ctgggcccctg tcctatcccc agaggccaga caggccttcc
120
tcgcatgcaa gagtctccct cgccctgccg gacagtggcc tccatctacc tgctgtctt
180
gctggactcc agaacactcc agtcctttcc cccttggggg ttgggggggg ccccccttt
240
ttttcccccc ctttcctct tcatccaca ggaggccagc ctcaacatcc ccnccc
296

```

&lt;210&gt; 2450

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2450

```

Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
  1          5          10         15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
      20         25         30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
      35         40         45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

```

<400> 2452
Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro
 1          5          10          15
Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala
          20          25          30
Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala
          35          40          45
Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu
          50          55          60
Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe
65          70          75          80
Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala
          85          90          95
Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg
          100          105          110
Thr Glu Ala Leu Ser Ile Gly Val Asp
          115          120

```

&lt;210&gt; 2453

&lt;211&gt; 695

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2453

```

nnacgcgtca gccatctgtg agtgctcaca ctatacacac atccccgggc acactcaggg
60
agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac
120
acaggttggc acacgcacat gcccctgggt atgctcatgt ccattcatcc atcccagcct
180
gtgcacgtcc tctcactcct gtgttcacac ctatgcccaa atgaaccaag ggacacacat
240
gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgctca
300
gaggcatttg tgtgcgtggg catttgcagc atgactcaga acggagtatg gggtaggcgcg
360
gcgtggctgg ggaggtecca tcagcccgcc tctgaaacct tcccaacctg cccatcctgg
420
cccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa
480
gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctcccctcgg
540
gaccggccac gacgcagtgc ccacaggga caccaggtga catgggtgct gcactaggca
600
ggggtggcca gggaatgggt gagtgtggga aagaggctgt ggacccgact tagtcatgtc
660
agcccccgca agaaggagca ccaggctcca gatct
695

```

&lt;210&gt; 2454

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2454

```

Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro
1          5          10          15
Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu
20          25          30
Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His
35          40          45
Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr
50          55          60
Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr
65          70          75          80
Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln
85          90          95
Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys
100         105         110
Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys
115         120         125
Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

```

130	135	140
Leu Ser Pro Arg Asp Arg	Pro Arg Arg Ser Ala His Arg Asp His Gln	
145	150	155
Val Thr Trp Val Leu His		160
165		

<210> 2455  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 2455  
 acgcgtcggc agaagcgtca gctgaccgtc ggagccgac tgtccccagg cgtcgtcagc  
 60  
 ggaaccgcgc agaaggaaat ccacgcgctg ccgatcatga aggcgctccc catgggcgtc  
 120  
 aaagaactcg ttctgggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc  
 180  
 gcgctgtttg caggcgtggt gttgctgttc gcggtgctgg tgctgctgta ccggcgcttg  
 240  
 ctgccgccgt tcatcaacgt gatgtcgtcg gcggtggcac cgctgggcgg gttgatcggc  
 300  
 ctgtggctga ccaacacgcc gatctcgatg ccggtctata tcggcttgat catgctgctc  
 360  
 ggcacgtcgc ccaagaat  
 378

<210> 2456  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 2456  
 Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro  
 1 5 10 15  
 Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile  
 20 25 30  
 Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser  
 35 40 45  
 Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala  
 50 55 60  
 Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Leu Tyr Arg Arg Leu  
 65 70 75 80  
 Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly  
 85 90 95  
 Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val  
 100 105 110  
 Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn  
 115 120 125

<210> 2457  
 <211> 754  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2457

cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag  
 60  
 atgagcgaat gtgacatctt gcacactctg cgatgggtctt ctgggctccg gatcagctcc  
 120  
 tatgtcaact ggataaagga tcaccttatc aaacagggaa tgaaggctga gcatgctagc  
 180  
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaatatga tgttgaaata  
 240  
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc  
 300  
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta  
 360  
 aaaggcccag gtcttttttg gatgagcatt tttctaagat ggctgctgag actgacctc  
 420  
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct  
 480  
 atgcatcggt caccagagcc tatttgctgc aaaactttaa tgaagaggga acaactgaga  
 540  
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt  
 600  
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg  
 660  
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcctggcgca  
 720  
 atgcctttgc caatgacacc atcccttcac gcgt  
 754

&lt;210&gt; 2458

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2458

Met	Asn	Ser	Pro	Glu	Met	Ser	Glu	Cys	Asp	Ile	Leu	His	Thr	Leu	Arg
1				5				10						15	
Trp	Ser	Ser	Arg	Leu	Arg	Ile	Ser	Ser	Tyr	Val	Asn	Trp	Ile	Lys	Asp
			20					25					30		
His	Leu	Ile	Lys	Gln	Gly	Met	Lys	Ala	Glu	His	Ala	Ser	Ser	Leu	Leu
		35					40					45			
Glu	Leu	Ala	Ser	Thr	Thr	Lys	Cys	Ser	Ser	Val	Lys	Tyr	Asp	Val	Glu
	50					55					60				
Ile	Val	Glu	Glu	Tyr	Phe	Ala	Arg	Gln	Ile	Ser	Ser	Phe	Cys	Ser	Ile
65					70				75					80	
Asp	Cys	Ala	Thr	Ile	Leu	Gln	Leu	His	Glu	Ile	Pro	Ser	Leu	Gln	Ser
			85					90					95		
Ile	Tyr	Thr	Leu	Asp	Ala	Ala	Ile	Leu	Lys	Gly	Pro	Gly	Leu	Phe	Gly
		100					105					110			
Met	Ser	Ile	Phe	Leu	Arg	Trp	Leu	Leu	Arg	Leu	Ile	Leu	Ile	Ser	Arg
	115						120					125			
Leu	Arg	Leu	Pro	Arg	Thr	Tyr	Phe	Gln	Pro	Arg	Cys	Asn	Ser	Leu	Thr
	130					135					140				
Pro	Met	His	Arg	Ser	Pro	Glu	Pro	Ile	Cys	Cys	Lys	Thr	Leu	Met	Lys

```

145          150          155          160
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
          165          170          175
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
          180          185          190
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
          195          200          205
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
          210          215          220
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
225          230          235

```

```

<210> 2459
<211> 382
<212> DNA
<213> Homo sapiens

```

```

<400> 2459
accggtgcac agatcggttct ggccgcgtgc actgccccgc tcaagcaaat cgctatcaac
60
gctgggtcttg agggcggcgt cgtggctgag aaggctcgtg gtctgccccgc aggacagggc
120
ctcaacgcgg ccaatgacga gtatgtcgac atggtagagg ccggcatcat tgacccggcc
180
aaggtgaccc gttcggctct gcagaacgcc gcgtccatcg cggccctggt cctcaccact
240
gaagccgtca tcgctgacaa gcccgagcct gttaaggctc ccgctggcgg cggtgatatg
300
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
360
gggatgccac ttgccccag gc
382

```

```

<210> 2460
<211> 110
<212> PRT
<213> Homo sapiens

```

```

<400> 2460
Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
1          5          10          15
Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
          20          25          30
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
          35          40          45
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
          50          55          60
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
65          70          75          80
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
          85          90          95
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
          100          105          110

```

<210> 2461  
 <211> 558  
 <212> DNA  
 <213> Homo sapiens

<400> 2461  
 tccggacaaa agggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc  
 60  
 tgcaatgctg tttgtcgtca tgctcggggg caagcaccca cgggctaaaa tcgaaattca  
 120  
 cgatgtggta ttcgcagtcg cggatacgtc gcaacacacc tacaccaat tgcgcgacgg  
 180  
 ctggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgac  
 240  
 ggctggaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcatca cctgtacttc  
 300  
 atcaacctcg gcggctacga ggccaacgct tttggcgagg cccatcatta cctgctggtg  
 360  
 gtcgcccggg acaaacagga agccaagcgc aaggggcagc ggcaaagtgt gcaacactgg  
 420  
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctggtg  
 480  
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac  
 540  
 tacatcatcc tgccgcga  
 558

<210> 2462  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 2462  
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu  
 1 5 10 15  
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr  
 20 25 30  
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn  
 35 40 45  
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val  
 50 55 60  
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp  
 65 70 75 80  
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg  
 85 90 95  
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly  
 100 105 110  
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Ala Asn Val  
 115 120 125  
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg  
 130 135 140  
 Leu Leu Ala Asp  
 145

<210> 2463  
<211> 333  
<212> DNA  
<213> Homo sapiens

<400> 2463  
cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccggt gagcgccaag  
60  
ttcggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg  
120  
ccctatggcg aaacccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg  
180  
ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat  
240  
accttgggca ttgccttcct gacgacgacg ctggcgtttc tgctcgggtg tttgagcggg  
300  
ttggtcgcgg cgatcaaggg cggttgggtc gac  
333

<210> 2464  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2464  
Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe  
1 5 10 15  
Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro  
20 25 30  
Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala  
35 40 45  
Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp  
50 55 60  
Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala  
65 70 75 80  
Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu  
85 90 95  
Val Ala Ala Ile Lys Gly Gly Trp Val Asp  
100 105

<210> 2465  
<211> 434  
<212> DNA  
<213> Homo sapiens

<400> 2465  
nntcatgagg acatttcctt catatttggt ggtggtaaatt ccttcctggg acacgggggaa  
60  
atgaccagag gctggcgggc cacctggcag gaacagatgc cagctctgct gcagccatcg  
120  
ccccttgagc ggggtggctct gtgcctcttt ctgcactgct ggtgggtggt gctgttggtg  
180  
gggtgatgga taccggctgc cagagatggc tcaggtgcca gctgctgggc tatctcaggc  
240



actggctgct gggctatctc ggggtgccggc tgctgggcta tctcaggcgc tggctgctgc  
300  
tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt  
360  
gctgggtgcc agctgctgcc taccttgac tgggctctgg gcactcactg cactcgggct  
420  
tttccatctc cgac  
434

<210> 2466  
<211> 82  
<212> PRT  
<213> Homo sapiens

<400> 2466  
Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile  
1 5 10 15  
Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile  
20 25 30  
Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp  
35 40 45  
Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu  
50 55 60  
Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro  
65 70 75 80  
Ser Pro

<210> 2467  
<211> 306  
<212> DNA  
<213> Homo sapiens

<400> 2467  
atggactcca ccggcaccgg agcaggggggt aaggggaaga agggagcggc cgggcgcaag  
60  
gtcggcgggc caaggaagaa gtcggtgtcg aggtccgtga aggccggtct ccagttcccc  
120  
gtcggccgca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc  
180  
gccccgtct acctcgccgc tgtcctcgaa tacctcgccg ctgaggttct ggagctcgcc  
240  
ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg  
300  
atccgg  
306

<210> 2468  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 2468  
Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

```

      1           5           10           15
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
      20           25           30
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
      35           40           45
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
      50           55           60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
      65           70           75           80
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
      85           90           95
Val Leu Leu Ala Ile Arg
      100

```

<210> 2469  
 <211> 489  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2469
gccggcgtgg cacatggcctt ccctgaagcc agcattgccc tggccaagga agctttgcag
60
aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
120
ggaaagggca ttcaaaggcc agggacagag tatgggtcaaa ggcattggaga tgaggaagag
180
gggaccagag cagaggggtca gggttgaaag cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtgggaat gttggagaaa acactttttg gtgtcgttac attgaatctg ctcactata
360
agaataaaac tttatttcat agagttattg tatgggtcaa aataggtatg aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

```

<210> 2470  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

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<400> 2470
Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
      1           5           10           15
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
      20           25           30
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
      35           40           45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
      50           55           60
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

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65                                70                                75                                80  
 Lys Gln Glu His Ser Leu Val Leu Ser Asp His Phe Arg Trp Lys Gly  
                                   85                                90                                95  
 Ser Gly Asn Val Gly Glu Asn Thr Phe Trp Cys Arg Tyr Ile Glu Ser  
                                   100                                105                                110  
 Ala His Leu  
                                   115

<210> 2471  
 <211> 779  
 <212> DNA  
 <213> Homo sapiens

<400> 2471  
 tggccatcct ccgtgacatg tacacttcca atatgccggt gtttgagccg ttcatagatc  
 60  
 ctcacatggg ggccttgac ttctttcaca gtgaggacct ctgcttcatg aggctcataa  
 120  
 gaagaggagc taaggactat tttgtcatgg gggcgccaat ccactgcac ttctactata  
 180  
 attctctcat ttctgaggc aatatcagct ccaagatgtg tccaggagtt cttaggataa  
 240  
 gcactgtaaa gatgaacttt ccataaacc ccaattgttc ctgggtcaat atgaattcca  
 300  
 ttcatacggg caaaaagac tccctctgag gctctaagga gaatcagaag cttttgttcc  
 360  
 ttttctaagg gattttctaa agtaccaact ttcagctccc cgcttgcaat gaccatgcat  
 420  
 gccacactca gaacattgct tctgtccaca gggaagtcta aggtcccat cacatacagc  
 480  
 cctttgaaga attggaaaat ctgtatccac aaggacagtt ctgttgggta aatgagaac  
 540  
 gtcacccca ggcctggaa tggattgtt gtatcctccc cagccttctt caacaccttg  
 600  
 ccatgtttca gggagggacc attttaaagc tgattcaggg gcagaggtag aagctgaaat  
 660  
 agttgggggc ataccttctt tcacccggag aatgacttga acttggcctt cacctaaaac  
 720  
 cagataggtg agttgcctca gctggctatt gaagaaccag tcacagcctt ggttctggc  
 779

<210> 2472  
 <211> 181  
 <212> PRT  
 <213> Homo sapiens

<400> 2472  
 Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile  
 1                                5                                10                                15  
 Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro  
                                   20                                25                                30  
 Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly  
                                   35                                40                                45  
 Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

50	55	60
Lys Leu Leu Ile Leu Leu Arg Ala Ser Glu Gly Val Phe Cys Asp Arg		
65	70	75
Met Asn Gly Ile His Ile Asp Pro Gly Thr Ile Gly Val Tyr Gly Lys		80
	85	90
Val His Leu Tyr Ser Ala Tyr Pro Lys Asn Ser Trp Thr His Leu Gly		95
	100	105
Ala Asp Ile Ala Ser Gly Asn Glu Arg Ile Ile Val Glu Asp Ala Val		110
	115	120
Asp Trp Arg Pro His Asp Lys Ile Val Leu Ser Ser Ser Tyr Glu		125
	130	135
Pro His Glu Ala Glu Val Leu Thr Val Lys Glu Val Lys Gly His His		140
	145	150
Val Arg Ile Tyr Glu Arg Leu Lys His Arg His Ile Gly Ser Val His		155
	160	165
Val Thr Glu Asp Gly		170
	175	
	180	

&lt;210&gt; 2473

&lt;211&gt; 698

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2473

nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga  
 60  
 cgcattctgct ccaaggccca cagctggcag ccgnnggcatt ccagaaccca taccggggca  
 120  
 ccgtggtgtg gatggtacnc tgagaatgtg gacattctctg tgaccctcta cagggaacccc  
 180  
 cacgtggacc agtatgaggc caaagagtgg acatttatta ttgaaaatga gtctaagggg  
 240  
 cagcgggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtgcc  
 300  
 ntgtccaagt ccnactgag gctgcggctg aagccaaagt cagtgaagac ggtgcaggct  
 360  
 gagctgagcc tcactctttc cggggtgctg ctgcgggagg gccgtgccac ggacgatgac  
 420  
 atgcagagtc tcgcaagcct catgagtgtg aagcctagt atgtgggcaa cttggatgac  
 480  
 ttgtctgaga gtgatgaaga tgaggctcat ggcccaggag ccccgagggc ccgggctcga  
 540  
 gtccccacgc caggtgggct cacagcctgc tgtggatcga gactgccaag acctggggag  
 600  
 ggagggttac ccgggccacc agccacttgc tgtgcccgcc ctgtgatggg aactcattac  
 660  
 tgcccaggca gtcccaacca acccagcagc ctcaattg  
 698

&lt;210&gt; 2474

&lt;211&gt; 232

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2474

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr  
 1 5 10 15  
 Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa  
 20 25 30  
 Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu  
 35 40 45  
 Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln  
 50 55 60  
 Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly  
 65 70 75 80  
 Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala  
 85 90 95  
 Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro  
 100 105 110  
 Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly  
 115 120 125  
 Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu  
 130 135 140  
 Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp  
 145 150 155 160  
 Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu  
 165 170 175  
 Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly  
 180 185 190  
 Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala  
 195 200 205  
 Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser  
 210 215 220  
 Pro Asn Gln Pro Ser Ser Leu Asn  
 225 230

&lt;210&gt; 2475

&lt;211&gt; 1251

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2475

ngcgcgcccg agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc  
 60  
 agccccctcc tggcctgctg gcagcccatc ctctgctgg tgctgggctc agtgctgtca  
 120  
 ggctcggcca cgggctgccc gccccgctgc gaggctccg ccaggaccg cgctgtgctg  
 180  
 tgccaccgca agcgctttgt ggcagtcccc gagggcatcc ccaccgagac gcgcctgctg  
 240  
 gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag cttcccgcac  
 300  
 ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccgg cgccttcaac  
 360  
 aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgcta  
 420  
 ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt  
 480

atcctactgg actacatgtt tcaggacctg tacaacctca agtcactgga ggttggcgac  
 540  
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg  
 600  
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc  
 660  
 ctcacgtcc tgaggctccg gcacctcaac atcaatgcca tccgggacta ctccttcaag  
 720  
 aggctgtacc gactcaaggt cttggagatc tcccactggc cctacttgga caccatgaca  
 780  
 cccaactgcc tctacggcct caacctgacg tcctgtcca tcacacactg caatctgacc  
 840  
 gctgtgccct acctggcgt ccgccaccta gtctatctcc gcttcctcaa cctctcctac  
 900  
 aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc  
 960  
 cagctggtgg gcgggcagct ggccgggtgg agccctgcct tccgcggcct caactacctg  
 1020  
 cgcgtgctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg  
 1080  
 gtgggcaacc tggagacact catcctggac tccaaccgcg tggcctgcga ctgtcggctc  
 1140  
 ctgtgggtgt tccggcgccg tggcctacaa acttcaaccg gcagcagccc acgtgcgcca  
 1200  
 cgcccgagtt tgtccagggg caaggagttc aaggacttcc ctgatgtgct a  
 1251

&lt;210&gt; 2476

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
1				5					10					15	
Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20					25					30		
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
		35					40					45			
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
	50					55					60				
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
65					70					75				80	
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
			85						90					95	
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
			100						105					110	
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
		115					120					125			
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
		130					135					140			
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
145				150						155				160	
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu

				165				170					175				
Glu	Val	Gly	Asp	Asn	Asp	Leu	Val	Tyr	Ile	Ser	His	Arg	Ala	Phe	Ser		
			180					185					190				
Gly	Leu	Asn	Ser	Leu	Glu	Gln	Leu	Thr	Leu	Glu	Lys	Cys	Asn	Leu	Thr		
		195					200					205					
Ser	Ile	Pro	Thr	Glu	Ala	Leu	Ser	His	Leu	His	Gly	Leu	Ile	Val	Leu		
	210					215					220						
Arg	Leu	Arg	His	Leu	Asn	Ile	Asn	Ala	Ile	Arg	Asp	Tyr	Ser	Phe	Lys		
225					230					235					240		
Arg	Leu	Tyr	Arg	Leu	Lys	Val	Leu	Glu	Ile	Ser	His	Trp	Pro	Tyr	Leu		
			245					250						255			
Asp	Thr	Met	Thr	Pro	Asn	Cys	Leu	Tyr	Gly	Leu	Asn	Leu	Thr	Ser	Leu		
		260					265					270					
Ser	Ile	Thr	His	Cys	Asn	Leu	Thr	Ala	Val	Pro	Tyr	Leu	Ala	Val	Arg		
	275					280						285					
His	Leu	Val	Tyr	Leu	Arg	Phe	Leu	Asn	Leu	Ser	Tyr	Asn	Pro	Ile	Ser		
290					295					300							
Thr	Ile	Glu	Gly	Ser	Met	Leu	His	Glu	Leu	Leu	Arg	Leu	Gln	Glu	Ile		
305					310					315					320		
Gln	Leu	Val	Gly	Gly	Gln	Leu	Ala	Gly	Trp	Ser	Pro	Ala	Phe	Arg	Gly		
			325					330						335			
Leu	Asn	Tyr	Leu	Arg	Val	Leu	Asn	Val	Ser	Gly	Asn	Gln	Leu	Thr	Thr		
		340						345					350				
Leu	Glu	Glu	Ser	Val	Phe	His	Ser	Val	Gly	Asn	Leu	Glu	Thr	Leu	Ile		
	355						360					365					
Leu	Asp	Ser	Asn	Pro	Leu	Ala	Cys	Asp	Cys	Arg	Leu	Leu	Trp	Val	Phe		
	370					375				380							
Arg	Arg	Arg	Gly	Leu	Gln	Thr	Ser	Thr	Gly	Ser	Ser	Pro	Arg	Ala	Pro		
385					390					395					400		
Arg	Pro	Ser	Leu	Ser	Arg	Gly	Lys	Glu	Phe	Lys	Asp	Phe	Pro	Asp	Val		
			405					410						415			

Leu

<210> 2477  
 <211> 548  
 <212> DNA  
 <213> Homo sapiens

<400> 2477  
 nagactgcga tcagacgcgc gtgcccagct gaaccaggtg cgtgagaagg ctgccttcag  
 60  
 gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg  
 120  
 aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggtcttga agcggcgggc  
 180  
 ctgctcctgg ccgtgaccat ggaccctctg gagacccta tcaaggatgg catcctctac  
 240  
 cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca  
 300  
 ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga  
 360  
 gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg  
 420

gctgactgtg tgtccgtgct gccggctgac ggcgagagct gcccccgga caccggtgcc  
 480  
 ttccctgctca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg  
 540  
 atggggccc  
 548

<210> 2478<211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 2478  
 Leu Glu Thr Pro Ile Lys Asp Gly Ile Leu Tyr Gln Gln His Val Lys  
 1 5 10 15  
 Phe Gly Lys Lys Cys Trp Arg Lys Val Trp Ala Leu Leu Tyr Ala Gly  
 20 25 30  
 Gly Pro Ser Gly Val Ala Arg Leu Glu Asn Trp Glu Val Arg Asp Gly  
 35 40 45  
 Gly Leu Gly Ala Ala Gly Asp Arg Ser Ala Gly Pro Gly Arg Arg Gly  
 50 55 60  
 Glu Arg Arg Val Ile Arg Leu Ala Asp Cys Val Ser Val Leu Pro Ala  
 65 70 75 80  
 Asp Gly Glu Ser Cys Pro Arg Asp Thr Gly Ala Phe Leu Leu Thr Thr  
 85 90 95  
 Thr Glu Arg Ser His Leu Leu Ala Ala Gln His Arg Gln Ala Trp Met  
 100 105 110  
 Gly

<210> 2479  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

<400> 2479  
 gaattcatgg aggtctatga ggaggatgaa gaatatgcgt atgaaaaata tgaaacccat  
 60  
 ttcggcacga gctggatgga ggagaccgca ggcaccttct cactgaactg gtatcgcagc  
 120  
 aggtactgga atgacaatga agcagcagaa aggcttgcgt tgatgtgggc taaaaccttc  
 180  
 aaatatgcgt cgataaacgt ctctggcag accgggatta gcaatagcga cgacgagggc  
 240  
 aatgaagatg aagacatgtt ctacgccggt atctccattc cgctgggagg cggggcgtag  
 300  
 tctaactcct ggtatcgtga atat  
 324

<210> 2480  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2480



Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys  
 1 5 10 15  
 Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr  
 20 25 30  
 Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala  
 35 40 45  
 Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser  
 50 55 60  
 Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly  
 65 70 75 80  
 Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly  
 85 90 95  
 Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr  
 100 105

<210> 2481  
 <211> 484  
 <212> DNA  
 <213> Homo sapiens

<400> 2481  
 gcgttcacta acgcttcaac aaactcttac aagcgtcttg ttcctggttt cgaagcacct  
 60  
 gttatgttgg cttactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca  
 120  
 agccctaaag gcaagcgtat tgaagctcgt ttccctgata caaccgctaa cccataccta  
 180  
 gcattttcag ctatgttgat ggctggatc gatggatatca aaaacaagat tcaccctggc  
 240  
 gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa  
 300  
 gttgctagca gcttagaaga agcgtttaag tgcctagatc aagaccgtga gttcttgact  
 360  
 caaggtggcg ttttctctga cgacatgata gatgcttaca tcgctcttaa agcagaagaa  
 420  
 gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa  
 480  
 gctt  
 484

<210> 2482  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 2482  
 Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly  
 1 5 10 15  
 Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala  
 20 25 30  
 Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu  
 35 40 45  
 Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala  
 50 55 60

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly  
 65 70 75 80  
 Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala  
 85 90 95  
 Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu  
 100 105 110  
 Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp  
 115 120 125  
 Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val  
 130 135 140  
 Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu  
 145 150 155

&lt;210&gt; 2483

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2483

acgcgtgtta gccaaatctt ggttcctccc gttctctcct taccgagcc tgaggccct  
 60  
 ctggagaaca ggcagcctct gaggaaacct ctgatecccg atcagccacc ccacgcctg  
 120  
 cgtccccagc cgcttcctcc tggccttggt ccccttccc tgtgaaggag agaacagttt  
 180  
 cggctggccc tgagatgctg gcaggcctgc agtcagggca gtgggcgcct cccaccttga  
 240  
 aatggtcctt cgtggtgcag ttctgcttac ggggtagact ttgttgctt ccacagagga  
 300  
 cagttagggg gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag  
 360  
 aagtgggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag  
 420  
 gtagaattga aattgagtga gccaacccac cacatccatc tggagccagg aactagt  
 477

&lt;210&gt; 2484

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2484

Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn  
 1 5 10 15  
 Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu  
 20 25 30  
 Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys  
 35 40 45  
 Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys  
 50 55 60  
 Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr  
 65 70 75 80  
 Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp  
 85 90 95

Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser  
                   100                  105                  110  
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg  
                   115                  120                  125  
 Phe Gly  
       130

<210> 2485  
 <211> 608  
 <212> DNA  
 <213> Homo sapiens

<400> 2485  
 accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc  
 60  
 aagacccgcg actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag  
 120  
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt ccccccgag  
 180  
 ctagctggca ccatactgcg tggcgtgacc cgcaagtcca ttctggaagt tgccccgac  
 240  
 ctcggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc  
 300  
 tctggcgagt tcccgggaagt cttcgccctgt ggtaccgccg cggttgtcac accgatcggc  
 360  
 tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccggaaa gaccacgatg  
 420  
 gagatccgtc gccgtctgct ggatatccag ttcggacgcg ctgaggacac ccatggctgg  
 480  
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cggccccaat gatgtgttca  
 540  
 cgatcgggct acgacggtgt cgatgacaat gtcttgccgc tggaaggttt gcccgacggt  
 600  
 gaacgcgt  
 608

<210> 2486  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 2486  
 Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser  
   1                  5                  10                  15  
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp  
                   20                  25                  30  
 Ala Val Glu His Arg Trp Ile Glu Glu Leu Gly Gly Met Asn Phe Met  
                   35                  40                  45  
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr  
                   50                  55                  60  
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp  
   65                  70                  75                  80  
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu  
                   85                  90                  95

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr  
                   100                  105                  110  
 Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp  
                   115                  120                  125  
 Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg  
                   130                  135                  140  
 Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp  
 145                  150                  155                  160  
 Leu Lys Arg Val Cys  
                   165

&lt;210&gt; 2487

&lt;211&gt; 339

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2487

nncccctcag gagagcagcc catggaaggt cccccccaag gggcccctga gagccctgac  
 60  
 agtctgcaaa gaaaccagaa agagctccag ggcctcctga cccaggtgca agccctggag  
 120  
 aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc  
 180  
 cagctgggag gggctgctcc tcaggctcct gctgccacc aaaagcccga ggcctcagtg  
 240  
 gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag  
 300  
 accttggtta ggctgctgga cattgaagag gctgtgcac  
 339

&lt;210&gt; 2488

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2488

Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro  
   1                  5                  10                  15  
 Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu  
                   20                  25                  30  
 Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp  
                   35                  40                  45  
 Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly  
                   50                  55                  60  
 Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val  
 65                  70                  75                  80  
 Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln  
                   85                  90                  95  
 Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val  
                   100                  105                  110  
 His

&lt;210&gt; 2489

<211> 594  
<212> DNA  
<213> Homo sapiens

<400> 2489  
nacgcgttct tcggactggc gacgatgctg atttctatcc cgacgggggt gaagctattt  
60  
aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc  
120  
ctgggcttca tggtagacctt cgcgatcgga ggcgatgaccg gcgtactgct ggccatcccg  
180  
ggtgctgact tcgtactgca caacagcctg ttcggaattg ctcacttcca caacgtgatc  
240  
atcggcggcg cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcgttc  
300  
ggcttcaagc tgcacgaaag ctggggcaag gctgcattct ggttctggat ctcgggcttc  
360  
ttcgtcgct tcatgccgct ctatgcactg ggtttcattg gcatgaccg ttgtttgaac  
420  
gcccccccca cccctgagtg ggtcccgtac ctgtacgttg ccatggtcgg tgcactgatg  
480  
atcgctgtcg gtatcgcttg ccagttgatt cagctgtatg tcagcgtgcg tgatcgcaag  
540  
cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccttggaatg gtcg  
594

<210> 2490  
<211> 198  
<212> PRT  
<213> Homo sapiens

<400> 2490  
Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly  
1 5 10 15  
Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg  
20 25 30  
Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala  
35 40 45  
Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe  
50 55 60  
Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile  
65 70 75 80  
Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe  
85 90 95  
Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala  
100 105 110  
Phe Trp Phe Trp Ile Ser Gly Phe Phe Val Ala Phe Met Pro Leu Tyr  
115 120 125  
Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr  
130 135 140  
Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met  
145 150 155 160  
Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val  
165 170 175

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala  
                   180                  185                  190  
 His Thr Leu Glu Trp Ser  
                   195

<210> 2491  
 <211> 592  
 <212> DNA  
 <213> Homo sapiens

<400> 2491  
 acgcgtcacg caactgtcaa acttgccaat ccgcttgacg atactcgccc ctacctacgc  
 60  
 actacgttgt tgcctgggtct attccatgca gtaacgacga atatgtcgcg atctcaggat  
 120  
 gatcttgcag tggtcgaaag cggaactgta ttccgcgccg tcaactccggc tgcggcacccg  
 180  
 cgtcccgggtg tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg  
 240  
 ccagcccagc cgcgcatgct cgcggccgtg atctgtggca gctggctgcc cgatcgctgg  
 300  
 gatggagagt cggtaaggc tgactggcga cacgctgtgc tggtcgcca gaaggctgct  
 360  
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggctccatg gcatcccggg  
 420  
 cgttgtgcgg ctctcatcgt cgatgggaag gtcattggcc atgctgggtga gttgcacccc  
 480  
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat  
 540  
 gctttggtag cctgcgctcc gagcgggtggg gaggtcatgg ttatttcaag gt  
 592

<210> 2492  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 2492  
 Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg  
   1                  5                  10                  15  
 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr  
                   20                  25                  30  
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly  
                   35                  40                  45  
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val  
                   50                  55                  60  
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu  
 65                  70                  75                  80  
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu  
                   85                  90                  95  
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala  
                   100                  105                  110  
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val  
                   115                  120                  125

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala  
 130 135 140  
 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro  
 145 150 155 160  
 Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu  
 165 170 175  
 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val  
 180 185 190  
 Met Val Ile Ser Arg  
 195

<210> 2493  
 <211> 418  
 <212> DNA  
 <213> Homo sapiens

<400> 2493  
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 60  
 cccacacact atgagccgctc gctgcgtgac gttcggaccg tcgtgtattc gagagtcgcg  
 120  
 ctatcgaact acctcatgct cgaacctcat tcggtcatca agaccatcga ctcttcctta  
 180  
 cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg  
 240  
 atcccgtctgg ttgaaaatgc caacctagac accgtgtggc tggggttgcg cgtcattggc  
 300  
 aagggcgcca ggcggggagc cgaccgctct tcctcggctc acctccagct gacgtcggtg  
 360  
 gaggggcctg gggacttcac tgcctatata actgggacct ttggtcgacc tcagatct  
 418

<210> 2494  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2494  
 Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro  
 1 5 10 15  
 Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg  
 20 25 30  
 Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu  
 35 40 45  
 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser  
 50 55 60  
 Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val  
 65 70 75 80  
 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu  
 85 90 95  
 Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser  
 100 105 110  
 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala  
 115 120 125

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile  
130 135

<210> 2495

<211> 1478

<212> DNA

<213> Homo sapiens

<400> 2495

nnggcctggc ccagttgcac cacgagcgt gcggacactc ggggcggcag tcggtctgtc  
60  
agtcctcccg ccaggtcccg cggcccgcac ctgccgcccg cacctgcagc tccgcacctg  
120  
cggccagtgc ctactgccct ctcttgccgc ccgcacctgc agccccgcac ctgccgcttg  
180  
cacctgcagc cccgcgctct acccggttca agcatggctg accaggcgcc cttcgacacg  
240  
gacgtcaaca ccctgacccg cttcgtcatg gaggagggca ggaaggcccg cggcacgggc  
300  
gagttgacct agctgctcaa ctctgtctgc acagcagtca aagccatctc ttcggcggtg  
360  
cgcaaggcgg gcctcgcgca cctctatggc attgctgggt ctaccaacgt gacagggtgat  
420  
caagttaaga agctggacgt cctctccaac gacctgggtta tgaacatggt aaagtcattc  
480  
tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag  
540  
aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc  
600  
cttgtgtccg ttggaaccat ttttggtatc tatagaaaga aatcaactga tgagccttct  
660  
gagaaggatg ctctgcaacc aggcgggaac ctggtggcag ccggctacgc actgtatggc  
720  
agtgccacca tgctggctct tgccatggac tgtgggggtca actgcttcat gctggacccg  
780  
gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc  
840  
tacagcctta acgagggtta cgccaaggac tttgaccctg ccgtcactga gtacatccag  
900  
aggaagaagt tccccccaga taattcagct ccttatgggg cccggtatgt gggctccatg  
960  
gtggctgatg ttcatcgcac tctgggtctac ggagggatat ttctgtacct cgctaacaag  
1020  
aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg  
1080  
gagaaggctg ggggaatggc caccactggg aaggaggccg tgtagacgt cattcccaca  
1140  
gacattcacc agaggcgcc ggtgatcttg gggcccccg acgacgtgct cgagttcctg  
1200  
aaggtgtatg agaagcactc tgcccagtga gcacctgcc tgctgcatc cggagaattg  
1260  
cctctacctg gaccttttgt ctacacagc agtaccctga cctgctgtgc accttacatt  
1320



cctagagagc agaaataaaa agcatgacta tttccaccat caaatgctgt agaatgcttg  
 1380  
 gcactcccta accaaatgct gtctccataa tgccactggg gttaagatat attttgagtg  
 1440  
 gatggaggag aaataaactt attcctcctt aaaaaaaaa  
 1478

<210> 2496

<211> 338

<212> PRT

<213> Homo sapiens

<400> 2496

Met	Ala	Asp	Gln	Ala	Pro	Phe	Asp	Thr	Asp	Val	Asn	Thr	Leu	Thr	Arg
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Phe	Val	Met	Glu	Glu	Gly	Arg	Lys	Ala	Arg	Gly	Thr	Gly	Glu	Leu	Thr
			20					25					30		
Gln	Leu	Leu	Asn	Ser	Leu	Cys	Thr	Ala	Val	Lys	Ala	Ile	Ser	Ser	Ala
			35				40					45			
Val	Arg	Lys	Ala	Gly	Ile	Ala	His	Leu	Tyr	Gly	Ile	Ala	Gly	Ser	Thr
	50					55				60					
Asn	Val	Thr	Gly	Asp	Gln	Val	Lys	Lys	Leu	Asp	Val	Leu	Ser	Asn	Asp
65					70					75				80	
Leu	Val	Met	Asn	Met	Leu	Lys	Ser	Ser	Phe	Ala	Thr	Cys	Val	Leu	Val
			85						90				95		
Ser	Glu	Glu	Asp	Lys	His	Ala	Ile	Ile	Val	Glu	Pro	Glu	Lys	Arg	Gly
			100					105					110		
Lys	Tyr	Val	Val	Cys	Phe	Asp	Pro	Leu	Asp	Gly	Ser	Ser	Asn	Ile	Asp
		115					120					125			
Cys	Leu	Val	Ser	Val	Gly	Thr	Ile	Phe	Gly	Ile	Tyr	Arg	Lys	Lys	Ser
	130					135					140				
Thr	Asp	Glu	Pro	Ser	Glu	Lys	Asp	Ala	Leu	Gln	Pro	Gly	Arg	Asn	Leu
145					150					155				160	
Val	Ala	Ala	Gly	Tyr	Ala	Leu	Tyr	Gly	Ser	Ala	Thr	Met	Leu	Val	Leu
			165					170					175		
Ala	Met	Asp	Cys	Gly	Val	Asn	Cys	Phe	Met	Leu	Asp	Pro	Ala	Ile	Gly
		180						185					190		
Glu	Phe	Ile	Leu	Val	Asp	Lys	Asp	Val	Lys	Ile	Lys	Lys	Lys	Gly	Lys
	195						200					205			
Ile	Tyr	Ser	Leu	Asn	Glu	Gly	Tyr	Ala	Lys	Asp	Phe	Asp	Pro	Ala	Val
	210					215					220				
Thr	Glu	Tyr	Ile	Gln	Arg	Lys	Lys	Phe	Pro	Pro	Asp	Asn	Ser	Ala	Pro
225					230					235				240	
Tyr	Gly	Ala	Arg	Tyr	Val	Gly	Ser	Met	Val	Ala	Asp	Val	His	Arg	Thr
			245						250				255		
Leu	Val	Tyr	Gly	Gly	Ile	Phe	Leu	Tyr	Pro	Ala	Asn	Lys	Lys	Ser	Pro
		260					265					270			
Asn	Gly	Lys	Leu	Arg	Leu	Leu	Tyr	Glu	Cys	Asn	Pro	Met	Ala	Tyr	Val
	275					280					285				
Met	Glu	Lys	Ala	Gly	Gly	Met	Ala	Thr	Thr	Gly	Lys	Glu	Ala	Val	Leu
295				300											290
Asp	Val	Ile	Pro	Thr	Asp	Ile	His	Gln	Arg	Ala	Pro	Val	Ile	Leu	Gly
305				310					315					320	
Ser	Pro	Asp	Asp	Val	Leu	Glu	Phe	Leu	Lys	Val	Tyr	Glu	Lys	His	Ser

325 330 335

Ala Gln

<210> 2497  
<211> 399  
<212> DNA  
<213> Homo sapiens

<400> 2497  
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cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg  
120  
atcctgtcag cgcgtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag  
180  
atggcgaacg gttccgagga cgaccgtgcc gttgcgatgg acaaatacgc gaaggctgaa  
240  
gaccgtctcg tcgcggcccg tggctatggc gcctctgcag aggcagcccc aatcgcgtcg  
300  
aacttggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc gggtggtcag  
360  
cgtcgtcgcg tcgagctggc gcgcatactc ttttccgga  
399

<210> 2498  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 2498  
Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg  
1 5 10 15  
Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp  
20 25 30  
Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp  
35 40 45  
His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly  
50 55 60  
Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu  
65 70 75 80  
Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala  
85 90 95  
Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro  
100 105 110  
Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg  
115 120 125  
Ile Leu Phe Ser Gly  
130

<210> 2499  
<211> 348  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 2499

nggccgggcg aagacccggtt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa  
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tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg  
120  
tggatcacca tcctgcgcaa gcgcgacaac tttcgcaaag ccttcgacga tttccagccc  
180  
gagaagatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgccggcatc  
240  
gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc  
300  
atggaaaaag gcccggggctt ctccaggctg ctgtgggact tcgtcgac  
348

&lt;210&gt; 2500

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2500

Xaa	Pro	Gly	Glu	Asp	Pro	Phe	Tyr	Met	Ala	Tyr	His	Asp	Thr	Glu	Trp
1				5					10					15	
Gly	Val	Pro	Glu	Tyr	Asp	Asp	Arg	Ala	Leu	Tyr	Glu	Lys	Leu	Ile	Leu
			20					25					30		
Asp	Gly	Phe	Gln	Ala	Gly	Leu	Ser	Trp	Ile	Thr	Ile	Leu	Arg	Lys	Arg
		35					40					45			
Asp	Asn	Phe	Arg	Lys	Ala	Phe	Asp	Asp	Phe	Gln	Pro	Glu	Lys	Ile	Ala
	50					55					60				
Arg	Tyr	Asn	Glu	Lys	Lys	Val	His	Ala	Leu	Met	Asn	Asp	Ala	Gly	Ile
65					70					75					80
Val	Arg	Asn	Arg	Ala	Lys	Ile	Glu	Gly	Thr	Ile	Ala	Ser	Ala	Lys	Ala
			85						90					95	
Tyr	Leu	Asp	Ile	Met	Glu	Lys	Gly	Pro	Gly	Phe	Ser	Arg	Leu	Leu	Trp
			100					105						110	
Asp	Phe	Val	Asp												
			115												

&lt;210&gt; 2501

&lt;211&gt; 569

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2501

gaattcgatt catttgtggc aaatgcttac aatttgatga ttgtaaccca tcaaatacaca  
60  
taatgcccac taagccactc catacacttc tttaaatagg aaaatatatg taaagtacgt  
120  
acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggtatgg  
180  
ctttcaagag tcaaacaatt ttactggtgc atcatttcca tttattcttt ctcttttgca  
240  
taataaaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag  
300

tagattctat agcttcaact ccctgaagag atgtgtgcta atttacctca aaaaaatcct  
360  
taagggtata aaatatgccca agaactgtca acatcacaga ttaccactgg tagcttctgg  
420  
tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct  
480  
acactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataaccca  
540  
gatgtgaaat gctgaatcat taatcacag  
569

<210> 2502  
<211> 100  
<212> PRT  
<213> Homo sapiens

<400> 2502  
Met Ile Ala Gly Val Arg Tyr Gly Phe Gln Glu Ser Asn Asn Phe Thr  
1 5 10 15  
Gly Ala Ser Phe Pro Phe Ile Leu Ser Leu Leu His Asn Lys Thr Thr  
20 25 30  
Leu Lys Ile Leu Pro Trp Leu Val Arg Asp Asn Ser Ser Leu Glu Ser  
35 40 45  
Arg Phe Tyr Ser Phe Asn Ser Leu Lys Arg Cys Val Leu Ile Tyr Ile  
50 55 60  
Lys Lys Ile Leu Lys Gly Ile Lys Tyr Ala Lys Asn Cys Gln His His  
65 70 75 80  
Arg Leu Pro Leu Val Ala Ser Gly Ile Leu Leu Ser Phe His Leu Ile  
85 90 95  
Phe Lys Gly His  
100

<210> 2503  
<211> 419  
<212> DNA  
<213> Homo sapiens

<400> 2503  
gccacgccag ccatctaccc tttcctcgac tcgccaaata agtattcact gaacatgtac  
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aaggccttgc tacctcagca gtccctacagc ttggcccagc cgctgtattc tccagtctgc  
120  
accaatgggg agcgctttct ctacctgccg ccacctcact acgtcggtcc ccacatccca  
180  
tcgtccttgg catcacccat gaggtctctg acaccttcgg cctccccagc catcccgcct  
240  
ctcgtccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct  
300  
gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc  
360  
aaggcgggtca ccagtggcct gccgggggac acagctctcc tgttgccccc ctcacgcgt  
419

<210> 2504

<211> 121  
<212> PRT  
<213> Homo sapiens

<400> 2504  
Met Tyr Lys Ala Leu Leu Pro Gln Gln Ser Tyr Ser Leu Ala Gln Pro  
1 5 10 15  
Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro  
20 25 30  
Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro  
35 40 45  
Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val  
50 55 60  
His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly  
65 70 75 80  
Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln  
85 90 95  
Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp  
100 105 110  
Thr Ala Leu Leu Leu Pro Pro Ser Arg  
115 120

<210> 2505  
<211> 540  
<212> DNA  
<213> Homo sapiens

<400> 2505  
tccggagcca atccgactca ggccctcgtc tggagccagg tgctgttgag catgggggttg  
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ccgctcgtgt tgggtgccgtt ggctcggttc accggcgatc ggcgtctgat gggccaatgg  
120  
acgaatgggc gtgtcatggc cgccatcgcg tggatcgtcg tggcagcagt ctcggctctc  
180  
aacgtgggtc tcgtcgtcga gacggtcgat ggtgcatgat ccttgagggc agttttcttg  
240  
cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga  
300  
cctctgcccc cgagctagcc aacgatttgg ccactgcatt tcgcgggtac cctgctggag  
360  
tggcgatcct cacgacgatg ggagcggctg ggcccagagg cttgacggtc tcctccctgg  
420  
cgtcgggtgc agtcgtcccg gctgttgtgt cgggtgctgtt gggtaatggt tcgacgaccc  
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tggccaccct gacggaggag tcccgcgtca tcgtccacat gcttgatgca gatcgcgcg  
540

<210> 2506  
<211> 72  
<212> PRT  
<213> Homo sapiens

<400> 2506  
Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

1	5	10	15
Ser Met Gly Leu Pro Leu Val Leu Val Pro Leu Ala Arg Phe Thr Gly			
	20	25	30
Asp Arg Arg Leu Met Gly Gln Trp Thr Asn Gly Arg Val Met Ala Ala			
	35	40	45
Ile Ala Trp Ile Val Val Ala Val Ser Ala Leu Asn Val Val Leu			
	50	55	60
Val Val Glu Thr Val Met Gly Ala			
65	70		

&lt;210&gt; 2507

&lt;211&gt; 922

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2507

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 240  
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 420  
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 480  
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 540  
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 660  
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 780  
 cacggggatg agtggggaga ccctggcaag tgtgagaacg gagacgcctg ccagtactgc  
 840  
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&lt;210&gt; 2508

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 2508  
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 His Trp His Phe Leu Asn Gln Arg Arg Arg Arg Pro Leu Arg Arg Arg  
 35 40 45  
 Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn  
 50 55 60  
 Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His  
 65 70 75 80  
 Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys  
 85 90 95  
 Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys  
 100 105 110  
 Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser  
 115 120 125  
 Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn  
 130 135 140  
 Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala  
 145 150 155 160  
 Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp  
 165 170 175  
 Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys  
 180 185 190  
 Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His  
 195 200 205  
 Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser  
 210 215 220  
 Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly  
 225 230 235 240  
 Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu  
 245 250 255  
 Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg  
 260 265 270  
 Gly Gly Gly Val Arg Glu  
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<210> 2509  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

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 120  
 gttcatgaac ggggtggagcc cggcaaaacc gaaactcaac caatccttgg ggatgctgga  
 180  
 cggcagggttg ccgagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc  
 240  
 caccgctccc agcgggaatct cgtagactta gcgccagggt tggtaaggcg tgtagcggtc  
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gtaacgacgg gtgacctega actcggggct tcaaagtctt ctgctgig  
348

<210> 2510  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2510  
Met Ala Pro Arg Gln Gly Pro Ile Leu Arg Ala Leu Val Ala Leu Asp  
1 5 10 15  
Phe Val Asp Ala Arg Glu Val Leu Leu Pro Ala Thr Ile Gly Leu Asp  
20 25 30  
Val His Glu Arg Val Glu Pro Gly Lys Thr Glu Thr Gln Pro Ile Leu  
35 40 45  
Gly Asp Ala Gly Arg Gln Val Ala Glu Gly Lys His Val Asp His Val  
50 55 60  
Arg Thr Asp Thr Thr Asp His Gly His Arg Ser Gln Arg Asn Leu Val  
65 70 75 80  
Asp Leu Ala Pro Gly Leu Val Arg Arg Val Ala Val Val Thr Thr Gly  
85 90 95  
Asp Leu Glu Leu Gly Ala Ser Lys Ser Ser Ala Val  
100 105

<210> 2511  
<211> 663  
<212> DNA  
<213> Homo sapiens

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120  
cctgtcatcg cacacgtcgg ttatccgcag gccgccgacg agtattacca gttgctttta  
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gcattacgcc caggacgcgt tgctggcctg gcggagatcg tcgtcaacgg tcaacctttt  
240  
accgtcactg acgccactga ggatgaacta gctctcactg cttgggctcg taccctctc  
300  
gaggggaactc ccatcgccat ggatggatcg tggcagctgc atcgccgctg agcggcccct  
360  
gagccagttc ggctcgctaa gcgcttcggg ggtgagcaat cgaacacctc gatcatgggtg  
420  
ggcgacgcca tcatcatcaa aatgttccgc cgcttgagc ccggcgacaa ccttgacatc  
480  
accgtgcata gcgccctcaa cgatgccggg atctcatcgg tggccacatt gtacggcttt  
540  
atgtccggac agatccccgc tgaggaacac atccccgctg atctagctat gatcattgag  
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660  
gac  
663



<210> 2512  
 <211> 221  
 <212> PRT  
 <213> Homo sapiens

<400> 2512  
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 20 25 30  
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr  
 35 40 45  
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro  
 50 55 60  
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe  
 65 70 75 80  
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala  
 85 90 95  
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln  
 100 105 110  
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg  
 115 120 125  
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile  
 130 135 140  
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile  
 145 150 155 160  
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr  
 165 170 175  
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro  
 180 185 190  
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly  
 195 200 205  
 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp  
 210 215 220

<210> 2513  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 2513  
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 120  
 gacctgaagt tctgcatgga tggagttcag actgctttga ggagtgaaga ttatgagcag  
 180  
 gctgcagcac atattcatcg ctacttgtgc ctggacaagt cggtcattga gctcagccga  
 240  
 cagggcaaag agggtcagca tccgaaactg gagcatgatt gatgccaaacc tgaaattgct  
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 gcaggaagct gagcaacgtc tcaaagccat tgtggcagag aagtttgcca ttgccaccaa  
 360

ggaaggtg  
368

<210> 2514  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 2514  
Leu Ala Gly Met Ile Thr Phe Thr Cys Asn Leu Ala Glu Asn Val Ser  
1 5 10 15  
Ser Lys Val Arg Gln Leu Asp Leu Ala Lys Asn Arg Leu Tyr Gln Ala  
20 25 30  
Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly  
35 40 45  
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala Ala His  
50 55 60  
Ile His Arg Tyr Leu Cys Leu Asp Lys Ser Val Ile Glu Leu Ser Arg  
65 70 75 80  
Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp  
85 90

<210> 2515  
<211> 351  
<212> DNA  
<213> Homo sapiens

<400> 2515  
agatccttaag ggccccagga atttgttttg ttttcctttt taactcccca ggtaattatg  
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gctcactctg gaccagaccc ttcctacccc tccaactccc caacaactgg gcaattggaa  
120  
tatcagtcca tccctaaaag ccaaccaggc tctcccgagg gaggcaggaa atccctgctc  
180  
cctccatccc ccaccgggaa tgctgcaggg ggcttgaggg aggcgacaca gtggggagct  
240  
ctgggtgcag gtgggcagac aatgggcca cacaccccct cagccccgct ccagtatcag  
300  
cattccagac ccaccacct gggcccttgg tcaccgggag acctcacgcg t  
351

<210> 2516  
<211> 98  
<212> PRT  
<213> Homo sapiens

<400> 2516  
Met Ala His Pro Gly Pro Asp Pro Ser Tyr Pro Ser Asn Ser Pro Thr  
1 5 10 15  
Thr Gly Gln Leu Glu Tyr Gln Ser Ile Pro Lys Ser Gln Pro Gly Ser  
20 25 30  
Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn  
35 40 45  
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala

50                      55                      60  
 Gly Gly Gln Thr Met Gly Gln His Thr Pro Ser Ala Pro Leu Gln Tyr  
 65                      70                      75                      80  
 Gln His Ser Arg Pro Thr His Leu Gly Pro Trp Ser Pro Gly Asp Leu  
                     85                      90                      95  
 Thr Arg

<210> 2517  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

<400> 2517  
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 ggaggtggcc agtgagtcag gaggcggggg ggggggctag ggcttcccca ggggtcagga  
 120  
 cctgtcacca accaaacccc atgggcctat tcagcagccc caacttggtt ggtctggccg  
 180  
 aggccacaca ttccctgggg actgagctcc aagggtgctgg gtccctgagc aggaagcggc  
 240  
 cagtgttgag tgggcagtgt ctactccag cccctccttc ccaggccagt tcttctcatc  
 300  
 tcctcagtc tttcccaagc aggcctcat ctacagggca gacctgactg gctagc  
 356

<210> 2518  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 2518  
 Met Gly Ala Glu Gly Glu Asp Lys Arg Arg Trp Pro Val Ser Gln Glu  
 1                      5                      10                      15  
 Ala Gly Gly Gly Ala Arg Ala Ser Pro Gly Val Arg Thr Cys His Gln  
                     20                      25                      30  
 Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala  
                     35                      40                      45  
 Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu  
                     50                      55                      60  
 Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro  
 65                      70                      75                      80  
 Pro Ser Gln Ala Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg  
                     85                      90                      95  
 Pro Ser Ser Thr Gly Gln Thr  
                     100

<210> 2519  
 <211> 830  
 <212> DNA  
 <213> Homo sapiens

<400> 2519

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 120  
 tctccatctg ctctgggact ctggcctgct gcttctctg cctgccactc cccaaccccg  
 180  
 tttctctctc tgaaaactgg agctacacct gcccacacag ggcagaatta ccttaaattg  
 240  
 cacaagacaa ttgcacagca gaccacctc ttctccaaag ttttcagggc ccaaaccag  
 300  
 acacctcctt gcaggactca tggctaccgt gggctcgcac caccagcctc cccatgcgtt  
 360  
 ttcttgctc tgcttttgct caatctgctc aatgacagaa acgcgacaac agagggcact  
 420  
 ttctccaaac ccagctctcc ctgcaggctc ccctctgct gctcacgctg aggccactct  
 480  
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 540  
 tcctcttgcc accactcaca atgcccagca gtgttaaaat ccggcaggat gcacccgctt  
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 660  
 acaggccagc atctaaaaga gatgtgcgct gagcgctcgt tatgtgggtg cgtcgctgtg  
 720  
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 780  
 gagacggggg aagccaaagt aaccactcag gccacagcag aaaaacgcgt  
 830

<210> 2520  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 2520  
 Met Ser Pro Ala Arg Arg Cys Leu Gly Leu Gly Pro Glu Asn Phe Gly  
 1 5 10 15  
 Glu Glu Val Gly Leu Leu Cys Asn Cys Leu Val Pro Phe Lys Val Ile  
 20 25 30  
 Leu Pro Cys Trp Gly Arg Cys Ser Ser Ser Phe Gln Arg Arg Lys Arg  
 35 40 45  
 Gly Trp Gly Val Ala Gly Arg Gly Ser Ser Arg Pro Glu Ser Gln Ser  
 50 55 60  
 Arg Trp Arg Ala Ala Ser Thr Arg Phe Leu Leu Val Gly Leu Arg Gln  
 65 70 75 80  
 Gly Leu Ala Pro Gly Leu Ser Gly Lys Arg Glu Glu Glu Leu Arg Leu  
 85 90 95  
 Arg Gly Ala Val Leu Pro Arg Arg Leu Thr Gly  
 100 105

<210> 2521  
 <211> 4291  
 <212> DNA  
 <213> Homo sapiens

<400> 2521  
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360  
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1980  
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2280  
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2820  
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2880  
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3000  
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gcctccccg ttcctccct gcggtgacct caactccagc ccattcctgtt ggtgaccgtc  
3120  
tatatccctg gggaaatttc cccccagtc cctccccag ggaaccacct ccagtaacca  
3180

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3300  
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3540  
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3600  
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3660  
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3720  
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3780  
agtccagttg atctccccctg acaatctgga aggttcattt tgccctcagt gccagccaat  
3840  
ccgggcagga cctcgaaga ggagaccgag ggtcccagag gaccaatgct acaagccagc  
3900  
aaatgctgcc acatctctgc ctgatggggg gtgggggatg gtggggggat gggactgggc  
3960  
caagggatct ggggtgggcat ttttaacttt ggaggccttc catctgtcgg taggcatct  
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4200  
ctctcccccga gctcatcatc agtcgctgtc tcttttctgt gatttctgta aaagttgcc  
4260  
taaaactttg aaattctgcc tgaaaaaaaa a  
4291

&lt;210&gt; 2522

&lt;211&gt; 952

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2522

Leu	Ser	Leu	Phe	Arg	Ala	Glu	Ser	Pro	Thr	Thr	Ala	Ser	Pro	Ala	Leu
1				5					10					15	
Gly	Gly	Pro	Ala	Pro	Gly	Cys	Ser	Arg	Arg	Thr	Pro	Pro	Pro	Pro	Met
			20					25					30		
Ala	Pro	Leu	Ala	Leu	Val	Gly	Val	Thr	Leu	Leu	Leu	Ala	Ala	Pro	Pro
		35					40					45			
Cys	Ser	Gly	Ala	Ala	Thr	Pro	Thr	Pro	Ser	Leu	Pro	Pro	Pro	Pro	Ala
	50					55				60					
Asn	Asp	Ser	Asp	Thr	Ser	Thr	Gly	Gly	Cys	Gln	Gly	Ser	Tyr	Arg	Cys

65 70 75 80  
Gln Pro Gly Val Leu Leu Pro Val Trp Glu Pro Asp Asp Pro Ser Leu  
85 90 95  
Gly Asp Lys Ala Ala Arg Ala Val Val Tyr Phe Val Ala Met Val Tyr  
100 105 110  
Met Phe Leu Gly Val Ser Ile Ile Ala Asp Arg Phe Met Ala Ala Ile  
115 120 125  
Glu Val Ile Thr Ser Lys Glu Lys Glu Ile Thr Ile Thr Lys Ala Asn  
130 135 140  
Gly Glu Thr Ser Val Gly Thr Val Arg Ile Trp Asn Glu Thr Val Ser  
145 150 155 160  
Asn Leu Thr Leu Met Ala Leu Gly Ser Ser Ala Pro Glu Ile Leu Leu  
165 170 175  
Ser Val Ile Glu Val Cys Gly His Asn Phe Gln Ala Gly Glu Leu Gly  
180 185 190  
Pro Gly Thr Ile Val Gly Ser Ala Ala Phe Asn Met Phe Val Val Ile  
195 200 205  
Ala Val Cys Ile Tyr Val Ile Pro Ala Gly Glu Ser Arg Lys Ile Lys  
210 215 220  
His Leu Arg Val Phe Phe Val Thr Ala Ser Trp Ser Ile Phe Ala Tyr  
225 230 235 240  
Val Trp Leu Tyr Leu Ile Leu Ala Val Phe Ser Pro Gly Val Val Gln  
245 250 255  
Val Trp Glu Ala Leu Leu Thr Leu Val Phe Phe Pro Val Cys Val Val  
260 265 270  
Phe Ala Trp Met Ala Asp Lys Arg Leu Leu Phe Tyr Lys Tyr Val Tyr  
275 280 285  
Lys Arg Tyr Arg Thr Asp Pro Arg Ser Gly Ile Ile Ile Gly Ala Glu  
290 295 300  
Gly Asp Pro Pro Lys Ser Ile Glu Leu Asp Gly Thr Phe Val Gly Ala  
305 310 315 320  
Glu Ala Pro Gly Glu Leu Gly Gly Leu Gly Pro Gly Pro Ala Glu Ala  
325 330 335  
Arg Glu Leu Asp Ala Ser Arg Arg Glu Val Ile Gln Ile Leu Lys Asp  
340 345 350  
Leu Lys Gln Lys His Pro Asp Lys Asp Leu Glu Gln Leu Val Gly Ile  
355 360 365  
Ala Asn Tyr Tyr Ala Leu Leu His Gln Gln Lys Ser Arg Ala Phe Tyr  
370 375 380  
Arg Ile Gln Ala Thr Arg Leu Met Thr Gly Ala Gly Asn Val Leu Arg  
385 390 395 400  
Arg His Ala Ala Asp Ala Ser Arg Arg Ala Ala Pro Ala Glu Gly Ala  
405 410 415  
Gly Glu Asp Glu Asp Asp Gly Ala Ser Arg Ile Phe Phe Glu Pro Ser  
420 425 430  
Leu Tyr His Cys Leu Glu Asn Cys Gly Ser Val Leu Leu Ser Val Thr  
435 440 445  
Cys Gln Gly Gly Glu Gly Asn Ser Thr Phe Tyr Val Asp Tyr Arg Thr  
450 455 460  
Glu Asp Gly Ser Ala Lys Ala Gly Ser Asp Tyr Glu Tyr Ser Glu Gly  
465 470 475 480  
Thr Leu Val Phe Lys Pro Gly Glu Thr Gln Lys Glu Leu Arg Ile Gly  
485 490 495  
Ile Ile Asp Asp Asp Ile Phe Glu Glu Asp Glu His Phe Phe Val Arg



			500					505				510			
Leu	Leu	Asn	Leu	Arg	Val	Gly	Asp	Ala	Gln	Gly	Met	Phe	Glu	Pro	Asp
		515					520					525			
Gly	Gly	Gly	Arg	Pro	Lys	Gly	Arg	Leu	Val	Ala	Pro	Leu	Leu	Ala	Thr
	530					535					540				
Val	Thr	Ile	Leu	Asp	Asp	Asp	His	Ala	Gly	Ile	Phe	Ser	Phe	Gln	Asp
545				550						555				560	
Arg	Leu	Leu	His	Val	Ser	Glu	Cys	Met	Gly	Thr	Val	Asp	Val	Arg	Val
			565						570					575	
Val	Arg	Ser	Ser	Gly	Ala	Arg	Gly	Thr	Val	Arg	Leu	Pro	Tyr	Arg	Thr
			580					585					590		
Val	Asp	Gly	Thr	Ala	Arg	Gly	Gly	Gly	Val	His	Tyr	Glu	Asp	Ala	Cys
	595						600					605			
Gly	Glu	Leu	Glu	Phe	Gly	Asp	Asp	Glu	Thr	Met	Lys	Thr	Leu	Gln	Val
	610					615					620				
Lys	Ile	Val	Asp	Asp	Glu	Glu	Tyr	Glu	Lys	Lys	Asp	Asn	Phe	Phe	Ile
625				630						635					640
Glu	Leu	Gly	Gln	Pro	Gln	Trp	Leu	Lys	Arg	Gly	Ile	Ser	Ala	Leu	Leu
			645					650						655	
Leu	Asn	Gln	Gly	Asp	Gly	Asp	Arg	Lys	Leu	Thr	Ala	Glu	Glu	Glu	Glu
		660						665					670		
Ala	Arg	Arg	Ile	Ala	Glu	Met	Gly	Lys	Pro	Val	Leu	Gly	Glu	Asn	Cys
	675						680					685			
Arg	Leu	Glu	Val	Ile	Ile	Glu	Glu	Ser	Tyr	Asp	Phe	Lys	Asn	Thr	Val
	690					695						700			
Asp	Lys	Leu	Ile	Lys	Lys	Thr	Asn	Leu	Ala	Leu	Val	Ile	Gly	Thr	His
705				710						715					720
Ser	Trp	Arg	Glu	Gln	Phe	Leu	Glu	Ala	Ile	Thr	Val	Ser	Ala	Gly	Asp
			725					730						735	
Glu	Glu	Glu	Glu	Glu	Asp	Gly	Ser	Arg	Glu	Glu	Arg	Leu	Pro	Ser	Cys
		740						745					750		
Phe	Asp	Tyr	Val	Met	His	Phe	Leu	Thr	Val	Phe	Trp	Lys	Val	Leu	Phe
	755						760					765			
Ala	Cys	Val	Pro	Pro	Thr	Glu	Tyr	Cys	His	Gly	Trp	Ala	Cys	Phe	Gly
	770					775					780				
Val	Ser	Ile	Leu	Val	Ile	Gly	Leu	Leu	Thr	Ala	Leu	Ile	Gly	Asp	Leu
785				790						795					800
Ala	Ser	His	Phe	Gly	Cys	Thr	Val	Gly	Leu	Lys	Asp	Ser	Val	Asn	Ala
			805					810						815	
Val	Val	Phe	Val	Ala	Leu	Gly	Thr	Ser	Ile	Pro	Asp	Thr	Phe	Ala	Ser
		820						825					830		
Lys	Val	Ala	Ala	Leu	Gln	Asp	Gln	Cys	Ala	Asp	Ala	Ser	Ile	Gly	Asn
	835					840						845			
Val	Thr	Gly	Ser	Asn	Ala	Val	Asn	Val	Phe	Leu	Gly	Leu	Gly	Val	Ala
	850					855					860				
Trp	Ser	Val	Ala	Ala	Val	Tyr	Trp	Ala	Val	Gln	Gly	Arg	Pro	Phe	Glu
865				870						875					880
Val	Arg	Thr	Gly	Thr	Leu	Ala	Phe	Ser	Val	Thr	Leu	Phe	Thr	Val	Phe
			885					890						895	
Ala	Phe	Val	Gly	Ile	Ala	Val	Leu	Leu	Tyr	Arg	Arg	Arg	Pro	His	Ile
		900						905					910		
Gly	Gly	Glu	Leu	Gly	Gly	Pro	Arg	Gly	Pro	Lys	Leu	Ala	Thr	Thr	Ala
	915					920						925			
Leu	Phe	Leu	Gly	Leu	Trp	Leu	Leu	Tyr	Ile	Leu	Phe	Ala	Ser	Leu	Glu

930 935 940  
Ala Tyr Cys His Ile Arg Gly Phe  
945 950

<210> 2523  
<211> 392  
<212> DNA  
<213> Homo sapiens

<400> 2523  
nnnattacct acgttcgcac cctgtcagga ttgcctaca ccgcatttgt cgtggatgtc  
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ttcagccgaa aaattgttgg tgttgctaca cgctcgacga tgcgtaccga tgcgctgccc  
120  
atggaggctt tggagcatgc gttaacgact gcagggcgaa ttcattgaaa ccagttaatt  
180  
caccatagcg atcggggcag ccagtacgtg tcaactgaagt attccaccgc gtttagcggaa  
240  
tccggaatcc gtccgagtgt gggaacagtc ggcgattctt atgacaatgc tctagccgaa  
300  
acagtcaacg gtctctacaa ggcggaactg attcatgccc aagggtccgtg gacgtcggtc  
360  
ggagaagtcg aattggccac cttgcggnnn nn  
392

<210> 2524  
<211> 130  
<212> PRT  
<213> Homo sapiens

<400> 2524  
Xaa Ile Thr Tyr Val Arg Thr Leu Ser Gly Phe Ala Tyr Thr Ala Phe  
1 5 10 15  
Val Val Asp Val Phe Ser Arg Lys Ile Val Gly Val Ala Thr Arg Ser  
20 25 30  
Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu  
35 40 45  
Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp  
50 55 60  
Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu  
65 70 75 80  
Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn  
85 90 95  
Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His  
100 105 110  
Ala Gln Gly Pro Trp Thr Ser Val Gly Glu Val Glu Leu Ala Thr Leu  
115 120 125  
Arg Xaa  
130

<210> 2525  
<211> 378  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 2525

acgcgttctc gggcgagggc atcgacagatt tcgaatgcac ggtgatggcg gtgtgccgca  
60  
tcccctttga atacgtgggtg ctgtcaccgc cgcgggaatc aagaaccgca cgttgcgcaa  
120  
atcgctgcgc tacgcaccaa cgtggtcggc aagatgttgg tcagcggcga gccccgnaa  
180  
tgattcatat ctccgatatc agcacgacag gggcgtcatt ccgctctgca catcggcttg  
240  
gaagtcagcg gtgcgcccgc acgcctgcga ttctgggtga agacgcgcga ctaccattca  
300  
gaactggtgg ccgcaacact cattcgcagc gagaagcccg ccgatttgcc caacacctat  
360  
caatacggcg tggaattc  
378

&lt;210&gt; 2526

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2526

Met	Ala	Val	Cys	Arg	Ile	Pro	Phe	Glu	Tyr	Val	Val	Leu	Ser	Pro	Pro
1			5					10					15		
Arg	Glu	Ser	Arg	Thr	Ala	Arg	Cys	Ala	Asn	Arg	Cys	Ala	Thr	His	Gln
			20				25					30			
Arg	Gly	Arg	Gln	Asp	Val	Gly	Gln	Arg	Arg	Ala	Pro	Xaa	Met	Ile	His
		35				40					45				
Ile	Ser	Asp	Ile	Ser	Thr	Thr	Gly	Ala	Ser	Phe	Arg	Ser	Ala	His	Arg
	50				55				60						
Leu	Gly	Ser	Gln	Arg	Cys	Ala	Arg	Thr	Pro	Ala	Ile	Ser	Gly	Glu	Asp
65				70				75					80		
Ala	Arg	Leu	Pro	Phe	Arg	Thr	Gly	Gly	Arg	Asn	Thr	His	Ser	Gln	Arg
			85				90						95		
Glu	Ala	Arg	Arg	Phe	Ala	Gln	His	Leu	Ser	Ile	Arg	Arg	Gly	Ile	
		100				105							110		

&lt;210&gt; 2527

&lt;211&gt; 305

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2527

ntggtcacct tccgaatggg acggcgggccc aaacccgaga tcattggccag caaagagcag  
60  
cagatccaga gagacgacct tggagccagt ccccagagca gcagccagcc agaccacggc  
120  
cgctctctcc cccagaagc tcccagacagg cccaccatct ccacggcctc cgagacctca  
180  
gtgtacgtga cctggattcc ccgtgggaat ggtgggttcc caatccagtc cttccgtgtg  
240  
gagtacaaga agctaaagaa agtgggagac tggattctgg ccaccagcgc catcccccca  
300

cgcgt  
305

<210> 2528  
<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2528  
Xaa Val Thr Phe Arg Met Gly Arg Arg Pro Lys Pro Glu Ile Met Ala  
1 5 10 15  
Ser Lys Glu Gln Gln Ile Gln Arg Asp Asp Leu Gly Ala Ser Pro Gln  
20 25 30  
Ser Ser Ser Gln Pro Asp His Gly Arg Leu Ser Pro Pro Glu Ala Pro  
35 40 45  
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr  
50 55 60  
Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val  
65 70 75 80  
Glu Tyr Lys Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser  
85 90 95  
Ala Ile Pro Pro Arg  
100

<210> 2529  
<211> 387  
<212> DNA  
<213> Homo sapiens

<400> 2529  
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60  
tgtgtcctcc gtgcccccg agtggcctgc tagcccgctc tccacacag tctccttgat  
120  
gtgaagtgtc acccggttg ctgcggcgtg tctccgccgt aacacgtgta taccggctca  
180  
gccatggcgg cggctgctgg gaaggctcct gcgtatggct ttgccatccg ggaccggggc  
240  
tttgctctgc aggggtgggc ttctgagcag aggaaggcca gaggtaacca ggtccatgca  
300  
cgtttgtgtc ttccacaat gtcgggcttt tatggatgct tttagtctca gtcacaaaag  
360  
ccatgagctc cacaggttcc tgaggga  
387

<210> 2530  
<211> 121  
<212> PRT  
<213> Homo sapiens

<400> 2530  
Met Ala Phe Val Thr Glu Thr Lys Ser Ile His Lys Ser Pro Thr Leu  
1 5 10 15  
Trp Lys Asp Thr Asn Val His Gly Pro Gly Tyr Leu Trp Pro Ser Ser

```

      20      25      30
Ala Gln Lys Pro Thr Pro Ala Glu Gln Ser Pro Gly Pro Gly Trp Gln
      35      40      45
Ser His Thr Gln Glu Pro Ser Gln Gln Pro Pro Pro Trp Leu Ser Arg
      50      55      60
Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr
65      70      75      80
Ser His Gln Gly Asp Cys Val Gly Glu Arg Ala Ser Arg Pro Leu Gly
      85      90      95
Gly His Gly Gly His Arg Glu Arg Leu Gln Trp Gln Ser Arg Pro Gly
      100      105      110
Asp Arg Asp Pro Pro Arg Gly Asp Ala
      115      120

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<210> 2531  
 <211> 396  
 <212> DNA  
 <213> Homo sapiens

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<400> 2531
tctagagata caaaaagtac tctatacact gagagacatc tggataaata caaagggttga
60
gctttccaac cagctgaaga tgacaagact aaacccaag tcgctgcagc tctgtgtcat
120
ctcatcagca gccctggaga tgacaaagat agtgctgagg gggaacagac cttcgtcatc
180
agttaaagat atgctagctt ttctttttct tccagacatt cctgaatcca gagaactttc
240
ctgtaatgcg tcaaatectt taggtctcaa ttctttccct agagagacaa ggagcacagt
300
tcgttcccaa ggccccccat gcttggcgag ggcgtctctg ctttccaggc agggtcctgc
360
tgcctccacc cacgtgcagg gaaaggaagg acgcgt
396

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<210> 2532  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

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<400> 2532
Met Thr Arg Leu Asn Pro Lys Ser Leu Gln Leu Cys Val Ile Ser Ser
1      5      10      15
Ala Ala Leu Glu Met Thr Lys Ile Val Leu Arg Gly Asn Arg Pro Ser
      20      25      30
Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro
      35      40      45
Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn
      50      55      60
Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro
65      70      75      80
Cys Leu Ala Arg Ala Ser Leu Leu Ser Arg Gln Gly Pro Ala Ala Ser
      85      90      95
Thr His Val Gln Gly Lys Glu Gly Arg

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100

105

<210> 2533  
 <211> 495  
 <212> DNA  
 <213> Homo sapiens

<400> 2533  
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 60  
 gctgtggcan ccccatgga cgtgatcaag tcgagactgc aggcagacgg gcagggccag  
 120  
 aggcgctacc ggggtctcct gcactgtatg gtgaccagcg ttcgagagga gggaccccgg  
 180  
 gtcctttttca aggggctggt actcaattgc tgccgcgcct tcctgtcaa catggtggtc  
 240  
 ttcgtcgcct atgaggcagt gctgaggctc gcccggggtc tgctcacata gccggtcctc  
 300  
 acgcccagcg gccacccac cagcagctgc tggaggctcg agtggctgga ggaggcaagg  
 360  
 ggtagtggtg ctgggttcgg gacccacacag ggccattgcc caggagaatg aggagcctcc  
 420  
 ctgcagtgtt gtcggccgag gcctgagctc gccctgccca gctactgacc tcaggctcgag  
 480  
 gggcccgcga gccat  
 495

<210> 2534  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 2534  
 Xaa Arg Pro Asp Val Pro Gly Val Leu Val Ala Gly Gly Cys Ala Gly  
 1 5 10 15  
 Val Leu Ala Trp Ala Val Ala Xaa Pro Met Asp Val Ile Lys Ser Arg  
 20 25 30  
 Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His  
 35 40 45  
 Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys  
 50 55 60  
 Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val  
 65 70 75 80  
 Phe Val Ala Tyr Glu Ala Val Leu Arg Leu Ala Arg Gly Leu Leu Thr  
 85 90 95

<210> 2535  
 <211> 1904  
 <212> DNA  
 <213> Homo sapiens

<400> 2535  
 ncggcccggg aacgtggctg gttggaggag gtagatcacc ctttctgcgg gggacgattt  
 60

cgtcggtggt aggctgctac catgaggttg aatcagaaca ccttgctgct ggggaagaag  
120  
gtggtccttg taccctacac ctccggagcat gtgcccagca ggtaccacga gtggatgaaa  
180  
tcagaggagc tgcagcgttt gacagcctcg gagccgctga ccctggagca ggagtatgcc  
240  
atgcagtgca gctggcagga agatgcagac aagtgtacct tcattgtgct ggatgccgag  
300  
aagtggcagg cccagccagg cgccaccgaa gagagctgca tgggtgggaga cgtgaacctc  
360  
ttcctcacag atctagaaga cccacacctg ggggagatcg aggtcatgat tgcagagccc  
420  
agctgcaggg gtaagggcct tggcactgag gccgttctcg cgatgctgtc ttacggagtg  
480  
accacgctag gtctgaccaa gtttgaggct aaaattgggc aaggaaatga accaagcatc  
540  
cggatgttcc agaaacttca ctttgagcag gtggctacga gcagtgtttt tcaggagggtg  
600  
accctcagac tgacagtgag tgagtccgag catcagtggc ttctggagca gaccagccac  
660  
gtggaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttgtg  
720  
ggcagccact ctgtgtgagc aggggtgttg gcccatacac ttcaaagacc agagccctgc  
780  
actgggagag tgctcctggc ccaggctggg aatcaccttt cgaggccctt cagactctgg  
840  
cggggcttgc tgtggcctcc ctccagctag tgggtgtggc gagcagactc cagggccagg  
900  
gccagttccc ttctcccctc ccggccaaac ccagaccag actctaggaa gctggaatgg  
960  
agggcagggg tccatgggag atgtcgggat gaaggtggga gctggagggtg cagggggacc  
1020  
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1080  
tgggagtga gctccaggca ctaccagctt tcttgatttt cccgtttggt ccatgtgaag  
1140  
agctaccacg agccccagcc tcacagtgtc cactcaaggg cagcttgggtc ctcttgctct  
1200  
gcagaggcag gctgggtgtg ccctgggaac ttgaccggg aacaacaggt ggtccagagt  
1260  
gagtgtggcc tggccctca acctagtgtc cgctcctc tctcctggag ccagtcttga  
1320  
gtttaaaggc attagtgtta gatacagctc cttgtggctg gaaaacaccc ctctgctgat  
1380  
aaagctcagg gggcactgag gaagcagagg ccccttgggg gtgccctcct gaagagagcg  
1440  
tcaggccatc agctctgtcc ctctggtgct cccacgtctg ttctcacc tccatctctg  
1500  
ggagcagctg cacctgactg gccacgcggg ggcagtggag gcacaggctc aggggtggccg  
1560  
ggctacctgg caccctatgg ctacaaaagt agagtggcc cagtttcctt ccacctgagg  
1620  
ggagcactct gactcctaac agtcttcctt gccctgccat catctggggg ggctggctgt  
1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggcttgtagg gcatcttcca  
1740  
ggtggggaaa cagtcttaga taagtaaggt gacttgccta aggcctccca gcacccttga  
1800  
tcttggagtc tcacagcaga ctgcatgtga acaactggaa ccgaaaacat gcctcagtat  
1860  
aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaag tact  
1904

<210> 2536  
<211> 207  
<212> PRT  
<213> Homo sapiens

<400> 2536  
Met Arg Leu Asn Gln Asn Thr Leu Leu Leu Gly Lys Lys Val Val Leu  
1 5 10 15  
Val Pro Tyr Thr Ser Glu His Val Pro Ser Arg Tyr His Glu Trp Met  
20 25 30  
Lys Ser Glu Glu Leu Gln Arg Leu Thr Ala Ser Glu Pro Leu Thr Leu  
35 40 45  
Glu Gln Glu Tyr Ala Met Gln Cys Ser Trp Gln Glu Asp Ala Asp Lys  
50 55 60  
Cys Thr Phe Ile Val Leu Asp Ala Glu Lys Trp Gln Ala Gln Pro Gly  
65 70 75 80  
Ala Thr Glu Glu Ser Cys Met Val Gly Asp Val Asn Leu Phe Leu Thr  
85 90 95  
Asp Leu Glu Asp Pro Thr Leu Gly Glu Ile Glu Val Met Ile Ala Glu  
100 105 110  
Pro Ser Cys Arg Gly Lys Gly Leu Gly Thr Glu Ala Val Leu Ala Met  
115 120 125  
Leu Ser Tyr Gly Val Thr Thr Leu Gly Leu Thr Lys Phe Glu Ala Lys  
130 135 140  
Ile Gly Gln Gly Asn Glu Pro Ser Ile Arg Met Phe Gln Lys Leu His  
145 150 155 160  
Phe Glu Gln Val Ala Thr Ser Ser Val Phe Gln Glu Val Thr Leu Arg  
165 170 175  
Leu Thr Val Ser Glu Ser Glu His Gln Trp Leu Leu Glu Gln Thr Ser  
180 185 190  
His Val Glu Lys Pro Tyr Arg Asp Gly Ser Ala Glu Pro Cys  
195 200 205

<210> 2537  
<211> 509  
<212> DNA  
<213> Homo sapiens

<400> 2537  
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gatgtcatcg tgctgcggtt ttccggagcc atggcgaagc gtectgcctc agttatcctt  
120  
ccgctgctac tgctggactc ccccgctcatt gcgtgggtggc ccttctccgg ccctgacaac  
180



ctcgccctcgg accccatcgg agcccttgcg gaccgccgca tcaccgactc ggcagctgac  
 240  
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac  
 300  
 ctgtgttggg ctgcaccac cagctggaga gccctagctg cagcagcttt ggatcaacat  
 360  
 ccagcgaccg tcaagttcgc tcgggtagag tcagccgccg gtaatgcgcc ggcgatgctg  
 420  
 ctggcagcct ggctaggatt gcgtctcggc gtcccggtcg agcgggtgac aaccgacgcg  
 480  
 cccggcatct ccgcatcgt catgtcgac  
 509

<210> 2538

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2538

Thr	Arg	Ser	Arg	Lys	Asp	Lys	Leu	Asp	Ala	Glu	Val	His	Ala	Gly	Glu
1				5				10						15	
Gly	Thr	Pro	Gly	Asp	Val	Ile	Val	Leu	Arg	Phe	Ser	Gly	Ala	Met	Ala
			20					25					30		
Lys	Arg	Pro	Ala	Ser	Val	Ile	Leu	Pro	Leu	Leu	Leu	Ser	Asp	Ser	Pro
		35					40					45			
Val	Ile	Ala	Trp	Trp	Pro	Phe	Ser	Gly	Pro	Asp	Asn	Leu	Ala	Ser	Asp
	50					55					60				
Pro	Ile	Gly	Ala	Leu	Ala	Asp	Arg	Arg	Ile	Thr	Asp	Ser	Ala	Ala	Asp
65					70				75					80	
Lys	Asp	Pro	Cys	Lys	Ala	Leu	Ile	Arg	Arg	Ala	Ala	His	Leu	Thr	Glu
			85					90					95		
Gly	Asp	Ser	Asp	Leu	Cys	Trp	Ala	Arg	Thr	Thr	Ser	Trp	Arg	Ala	Leu
			100					105					110		
Ala	Ala	Ala	Ala	Leu	Asp	Gln	His	Pro	Ala	Thr	Val	Lys	Phe	Ala	Arg
			115				120					125			
Val	Glu	Ser	Ala	Ala	Gly	Asn	Ala	Pro	Ala	Met	Leu	Leu	Ala	Ala	Trp
	130					135					140				
Leu	Gly	Leu	Arg	Leu	Gly	Val	Pro	Val	Glu	Arg	Val	Thr	Thr	Asp	Ala
145					150				155					160	
Pro	Gly	Ile	Ser	Ala	Ile	Val	Met	Ser							
					165										

<210> 2539

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2539

aagcttctac tgccgcgagc acgtcgtcca ccgtcgaggt catggttcta gtttgccgcg  
 60  
 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcgttt tctcaacgag  
 120  
 cagccgaact acgacctgac gtatgacgac gtcttcattg caccaaaccg ttcctcggtg  
 180

ggggtcccgca tgaacgtcga cctcacgtca acagacgggc taggcactcc tctgcccctc  
 240  
 gtagtggcca atatgaccgc aatttccgga cgtcgcatgg cagagaccat cgccaggcgc  
 300  
 ggaggcattg ctgttctgcc ccaagatatc ccggcggatt tctcgccccg gtccattcgg  
 360  
 cgcgtcaaag atgcgcatac tcgattcgac accccagtca ccgtcaaccc gacaacgact  
 420  
 gtcggtgagg ccatgaactt gctcaacaag cgc  
 453

<210> 2540

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2540

Phe	Ala	Ala	Ser	Arg	His	Asp	Pro	Arg	Ile	Val	Thr	Trp	Asp	Asn	Gly
1				5					10					15	
Tyr	Val	Arg	Phe	Leu	Asn	Glu	Gln	Pro	Asn	Tyr	Asp	Leu	Thr	Tyr	Asp
		20						25					30		
Asp	Val	Phe	Met	Ala	Pro	Asn	Arg	Ser	Ser	Val	Gly	Ser	Arg	Met	Asn
		35					40					45			
Val	Asp	Leu	Thr	Ser	Thr	Asp	Gly	Leu	Gly	Thr	Pro	Leu	Pro	Leu	Val
	50					55					60				
Val	Ala	Asn	Met	Thr	Ala	Ile	Ser	Gly	Arg	Arg	Met	Ala	Glu	Thr	Ile
65					70				75					80	
Ala	Arg	Arg	Gly	Gly	Ile	Ala	Val	Leu	Pro	Gln	Asp	Ile	Pro	Ala	Asp
			85					90					95		
Phe	Val	Ala	Arg	Ser	Ile	Arg	Arg	Val	Lys	Asp	Ala	His	Thr	Arg	Phe
		100						105					110		
Asp	Thr	Pro	Val	Thr	Val	Asn	Pro	Thr	Thr	Thr	Val	Gly	Glu	Ala	Met
		115					120					125			
Asn	Leu	Leu	Asn	Lys	Arg										
		130													

<210> 2541

<211> 564

<212> DNA

<213> Homo sapiens

<400> 2541

accggtctcc cacggagtcc tgtttcctca ggtactgcac tgtatacaac tctaaatgca  
 60  
 ccctgcatgg aaccattgc agggcacacg cagtctacat gtatcccagg ttttatgctc  
 120  
 acagagcctg caatactccg tgtctggaat acgttatttg ctgcacacct cccagaggaa  
 180  
 catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaac  
 240  
 actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc attttgact  
 300  
 caaatattcg gcttcataa caagttacat tgctcacatc ttaaaatatt cattacacgt  
 360

gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt  
420  
gcacagttct cactgttctg cgtgcccagc cctcacact ggacgcccac ctcacactct  
480  
tctgccaagg gagactttgg ttctcccctt cctgtgctg gctgtgcggg ccacagtcct  
540  
ctgcacgcca gcagcatgac gcgt  
564

<210> 2542  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2542  
Met Leu Cys Thr His Phe Leu Ile Phe Cys Val Glu Ser Thr Ser Phe  
1 5 10 15  
Cys Thr Gln Ile Phe Gly Phe His Asn Lys Leu His Cys Ser His Leu  
20 25 30  
Lys Ile Phe Ile Thr Arg Glu Thr Thr Ala Trp Tyr Arg His Pro Ser  
35 40 45  
Gly Met Ser Arg Thr Glu Ala Asp Ile Cys Ala Gln Phe Ser Leu Phe  
50 55 60  
Cys Val Pro Ser Pro Ser His Trp Thr Pro Thr Ser His Ser Ser Ala  
65 70 75 80  
Lys Gly Asp Phe Gly Ser Pro Leu Pro Cys Ala Gly Cys Ala Gly His  
85 90 95  
Ser Pro Leu His Ala Ser Ser Met Thr Arg  
100 105

<210> 2543  
<211> 387  
<212> DNA  
<213> Homo sapiens

<400> 2543  
cgctgaagg gggcggggaa aatggaatgg gggggaaggg cgcgggtggg gacatgctgg  
60  
aacgtgcca tgctttctgc accacactgg atgactgaag gggaaggaac gagcgtctta  
120  
ccgtcctga tgagattttt gtttttgcct aacaaagaaa tgtgtatgaa tgcacgtctg  
180  
tttgcagggg caggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc  
240  
tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag  
300  
gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gccctgtcc  
360  
aatggggccc agcaggcagc agtgctg  
387

<210> 2544  
<211> 122  
<212> PRT

<213> Homo sapiens

<400> 2544

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Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1           5           10           15
Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
          20           25           30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
          35           40           45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly
          50           55           60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
65           70           75           80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
          85           90           95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
          100          105          110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
          115          120

```

<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

```

gcgattattt tcgtgctgcc cggacttatc atggtcggct ggtggtcagg tttcccgtac
60
tggaaccacc tcgctatctg tctagtcggc ggcacccctcg gcgttatgta ctcgattccg
120
ctgcgtcggg ccctcgtgac aggctcggat cttccctacc cggagggcgt cgcaggagct
180
gaggtgctca aagtaggcga ttccgctggt gccgccgagg ctaacaaggt gggctctgcga
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tggtgtcgga tcttaagctt
300
gtgaagtcgg cgctgaccaa gcctttcaag acggggc
336

```

<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

```

Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1           5           10           15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
          20           25           30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
          35           40           45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
          50           55           60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```



<210> 2549

<211> 435

<212> DNA

<213> Homo sapiens

<400> 2549

nnccagcctc tctccgaccg cgtacgtatt gaatttgata aagaagccaa cacggttggt  
60  
atcgatgata atggtgtcgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt  
120  
gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc  
180  
caacttattg gtcaattcgg ttagggcttt tactctgctt tcatcgttgc tgataaagta  
240  
acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgctg ggtatctgat  
300  
ggttctggtg aatttactat tgagacgacg gataaagcga ctcgtggtac acgcattact  
360  
ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta  
420  
acaaaatatt ctgat  
435

<210> 2550

<211> 145

<212> PRT

<213> Homo sapiens

<400> 2550

Xaa	Gln	Pro	Leu	Ser	Asp	Arg	Val	Arg	Ile	Glu	Phe	Asp	Lys	Glu	Ala
1				5					10					15	
Asn	Thr	Val	Val	Ile	Asp	Asp	Asn	Gly	Val	Gly	Met	Ser	Arg	Glu	Glu
			20					25					30		
Ala	Ile	Thr	Asn	Leu	Gly	Thr	Ile	Ala	Lys	Ser	Gly	Thr	Ser	Ser	Phe
			35				40					45			
Leu	Glu	Gln	Leu	Ser	Gly	Asp	Gln	Lys	Lys	Asp	Ser	Gln	Leu	Ile	Gly
	50					55					60				
Gln	Phe	Gly	Val	Gly	Phe	Tyr	Ser	Ala	Phe	Ile	Val	Ala	Asp	Lys	Val
65					70					75				80	
Thr	Val	Glu	Thr	Arg	Arg	Ala	Gly	Ala	Thr	Glu	Asn	Glu	Ala	Val	Arg
				85					90					95	
Trp	Val	Ser	Asp	Gly	Ser	Gly	Glu	Phe	Thr	Ile	Glu	Thr	Ile	Asp	Lys
			100					105					110		
Ala	Thr	Arg	Gly	Thr	Arg	Ile	Thr	Leu	His	Leu	Lys	Ala	Asp	Glu	Lys
			115				120					125			
Asp	Phe	Ala	Asp	Asn	Phe	Arg	Leu	Arg	Ser	Leu	Val	Thr	Lys	Tyr	Ser
			130			135						140			
Asp															
145															

<210> 2551

<211> 403

<212> DNA

<213> Homo sapiens

&lt;400&gt; 2551

nngccggcca gcctcacatc agtctctccg ccccggggaa ggctcagcac tttaaatacga  
60  
ggactccact tctggggacg cctgggttcgt tcgcccacca ggcttaggct acgctccatg  
120  
ctccccagc aatctctgtc tacacctcct gcggcgccct gccctcctcc gacccctttc  
180  
cagccannaa gtccccccac cccttcagag aagcagcctc aaattccaga agtggaggct  
240  
ccagcctccc cgcgaggtag cagccccaca gtcttctggg agccattgtg gccagggacg  
300  
gcctctggac tgccaggctg ggttggggac cagggaacat cggctctactc aggtgtgagg  
360  
gggcaggtct ggctgcccc aaagttggct ccattctgga can  
403

&lt;210&gt; 2552

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2552

Xaa	Pro	Ala	Ser	Leu	Thr	Ser	Val	Ser	Pro	Pro	Arg	Gly	Arg	Leu	Ser
1				5					10					15	
Thr	Leu	Asn	Arg	Gly	Leu	His	Phe	Trp	Gly	Arg	Leu	Val	Arg	Ser	Pro
			20					25					30		
Thr	Arg	Pro	Arg	Leu	Arg	Ser	Met	Leu	Pro	Gln	Gln	Ser	Leu	Ser	Thr
		35					40					45			
Pro	Pro	Ala	Ala	Pro	Cys	Pro	Pro	Pro	Thr	Pro	Phe	Gln	Pro	Xaa	Ser
	50					55					60				
Pro	Pro	Thr	Pro	Ser	Glu	Lys	Gln	Pro	Gln	Ile	Pro	Glu	Val	Glu	Ala
65					70				75					80	
Pro	Ala	Ser	Pro	Arg	Gly	Thr	Ser	Pro	Thr	Val	Phe	Trp	Glu	Pro	Leu
				85					90					95	
Trp	Pro	Gly	Thr	Ala	Ser	Gly	Leu	Pro	Gly	Trp	Val	Gly	Asp	Gln	Gly
			100					105					110		
Thr	Ser	Val	Tyr	Ser	Gly	Val	Arg	Gly	Gln	Val	Trp	Pro	Ala	Pro	Lys
		115					120						125		
Leu	Ala	Pro	Ser	Trp	Thr										
															130

&lt;210&gt; 2553

&lt;211&gt; 380

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2553

actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg  
60  
gagagataca gcatggggcca aggagcactg ggagccagca gcagctggaa gaggcaggag  
120  
gcatcctccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt  
180

gaagtctgcc tgagtgggca ggggcttctg cgcagcaccc agcaaggcca aggtggaagg  
 240  
 gaccctcctg gcccctgtcc tggctccacc ctcagctgct ggcaggtggg tcaccaggcc  
 300  
 tctgccccaaa gaaactcctg caggcagctc tggacccctt gtcttacaca ccttctcact  
 360  
 gagcctgcca gcatcccagn  
 380

<210> 2554  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2554  
 Met Lys Gln Arg Leu Glu Arg Tyr Ser Met Gly Gln Gly Ala Leu Gly  
 1 5 10 15  
 Ala Ser Ser Ser Trp Lys Arg Gln Glu Ala Ser Ser Leu Asp Arg Thr  
 20 25 30  
 Gly Cys Tyr Trp Val Ser Leu Leu Ser Trp Lys Arg Arg Glu Val Cys  
 35 40 45  
 Leu Ser Gly Gln Gly Leu Leu Arg Ser Thr Gln Gln Gly Gln Gly Gly  
 50 55 60  
 Arg Asp Pro Pro Gly Pro Cys Pro Gly Ser Thr Leu Ser Cys Trp Gln  
 65 70 75 80  
 Val Gly His Gln Ala Ser Ala Gln Arg Asn Ser Cys Arg Gln Leu Trp  
 85 90 95  
 Thr Pro Cys Leu Thr His Leu Leu Thr Glu Pro Ala Ser Ile Pro  
 100 105 110

<210> 2555  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 2555  
 ntccggatgg aaaagtaaag accagcaata gccataacg ccattaacac ataccatat  
 60  
 atgttggttaa tgctgcccgg tagttcgggtg gcattcttca tgggcaatag tttaatggga  
 120  
 gataacgcga ataatggtag tgctggttcta gtgctcacag acctgggtcac ccaaatagaa  
 180  
 ggatttatat cctcccatat cctcattttt gtgctcggtg gcctcggtcat tgtctttacc  
 240  
 gttgccactc gaggtgtaca gttccgcctc ttcgggcaca tgtggcacct catgctcgat  
 300  
 tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctcgat  
 360  
 cacgcggn  
 368

<210> 2556  
 <211> 102  
 <212> PRT



<213> Homo sapiens

<400> 2556

```

Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1             5             10             15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
          20             25             30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
      35             40             45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
      50             55             60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
65             70             75             80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
          85             90             95
Val Gly Leu Asp His Ala
          100

```

<210> 2557

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2557

```

atcactactc cagttggtga ggcagttctg ggtcgcacatc taaatgtgat cggtagagccg
60
attgatgaga tgggcccagt taacgcgaaa gaaaaatggg aaattcaccg tccagctcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtcgttgat
180
cttcttgcac cttacgcaaa gggtaggcaag atcgggtctct tcggtaggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct
300
gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcgggtc agatgaat
408

```

<210> 2558

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1             5             10             15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
      20             25             30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
      35             40             45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
      50             55             60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

```

65          70          75          80
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His
          85          90          95
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly
          100          105          110
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr
          115          120          125
Ala Leu Val Phe Gly Gln Met Asn
          130          135

```

<210> 2559  
 <211> 389  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2559
tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa tttgcgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

```

<210> 2560  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2560
Ser Leu Lys Met Asn Ile Phe Arg Leu Gln Thr Glu Lys Asp Leu Asn
1          5          10          15
Pro Gln Lys Thr Ala Phe Leu Lys Asp Arg Leu Asn Ala Ile Gln Glu
          20          25          30
Glu His Ser Lys Asp Leu Lys Leu Leu His Leu Glu Val Met Asn Leu
          35          40          45
Arg Gln Gln Leu Arg Ala Val Lys Glu Glu Glu Asp Lys Ala Gln Asp
          50          55          60
Glu Val Gln Arg Leu Thr Ala Thr Leu Lys Ile Ala Ser Gln Thr Lys
65          70          75          80
Lys Asn Ala Ala Ile Ile Glu Glu Glu Leu Lys Thr Thr Lys Arg Lys
          85          90          95
Met Asn Leu Lys Ile Gln Glu Leu Leu Glu Met Thr Ser Phe Pro Ser
          100          105          110
Trp Leu Lys Lys Ile Arg Thr Cys Arg Ile Ser Phe Asn Arg Asn Met
          115          120          125
Lys

```

<210> 2561  
<211> 429  
<212> DNA  
<213> Homo sapiens

<400> 2561  
nnactcacca ctgtggttct actatgcctt ctgaccccggt cttggacttc aactgggaga  
60  
atgtggagcc atttgaacag gctcctcttc tggagcatat tttcttctgt cacttgtaga  
120  
aaagctgtat tggattgtga ggcaatgaaa acaaatgaat tcccttctcc atgtttggac  
180  
tcaaagacta aggtgggttat gaagggtcaa aatgtatcta tgttttgttc ccataagaac  
240  
aatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aaccaggat  
300  
ggaaaagggtg aacctgcgat ttttaaccta agcatcacag aagcccatga atcaggcccc  
360  
tacaaatgca aagcccaagt taccagctgt tcaaaataca gtcgtgactt cagcttcacg  
420  
attgtcgac  
429

<210> 2562  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 2562  
Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr  
1 5 10 15  
Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser  
20 25 30  
Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala  
35 40 45  
Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys  
50 55 60  
Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn  
65 70 75 80  
Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu  
85 90 95  
Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile  
100 105 110  
Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr  
115 120 125  
Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp  
130 135 140

<210> 2563  
<211> 267  
<212> DNA  
<213> Homo sapiens

<400> 2563  
ggatcccaga cgagtgctgg cagcagtatg ggggccgtgg gggcgacggc caccgtcagc  
60  
accccggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt  
120  
aaggccttta ccctttggga acaggcagag gccctcacia ggaagaacia agaattcttt  
180  
gctcagctca gcacaaaagt gcgcgtgttg gccctcaaca gcagcctggg ggacctggg  
240  
cactacacaa ggcagggcct ccagcgg  
267

<210> 2564  
<211> 89  
<212> PRT  
<213> Homo sapiens

<400> 2564  
Gly Ser Gln Thr Ser Ala Gly Ser Ser Met Gly Ala Val Gly Ala Thr  
1 5 10 15  
Ala Thr Val Ser Thr Pro Val Thr Ile Gln Asn Met Thr Ser Ser Tyr  
20 25 30  
Val Thr Ile Thr Ser His Val Leu Lys Ala Phe Thr Leu Trp Glu Gln  
35 40 45  
Ala Glu Ala Leu Thr Arg Lys Asn Lys Glu Phe Phe Ala Gln Leu Ser  
50 55 60  
Thr Lys Val Arg Val Leu Ala Leu Asn Ser Ser Leu Val Asp Leu Val  
65 70 75 80  
His Tyr Thr Arg Gln Gly Leu Gln Arg  
85

<210> 2565  
<211> 333  
<212> DNA  
<213> Homo sapiens

<400> 2565  
cttcgcactg ctccgcgagt tcttggggga gtgagcacag cgcgtaagct cagccacgtg  
60  
tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc ccccccgat  
120  
gggccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc  
180  
gacatcgccc agttgcagca actcgggtgtc tccgatgtgg tcgatctgcg ttccacctat  
240  
gaggtggcca gcgagggccc ggggccgctg accgggcgtg gggtgaccat ccacccccat  
300  
tccttcctgc ccgaccagca cgccaatgtg cac  
333

<210> 2566  
<211> 111  
<212> PRT

<213> Homo sapiens

<400> 2566

```

Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys
 1             5             10             15
Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp
             20             25             30
Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu
             35             40             45
Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln
             50             55             60
Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr
65             70             75             80
Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr
             85             90             95
Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His
             100            105            110

```

<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

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ngaattcaaa ctggtgttcg tatggggccat aagcaaggta catatacgat gcgttttaga
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agccagttca cagatcaacg tctattcgga accgatcaat ttagtattgg tgggcgctat
120
tctgtacgag gtttttagtgg agaagaaacc ttaagagggtg actcgggcta ttatgtacaa
180
aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt
240
ggacatgtat gggggccatc tacagaaact caattaggta ataccttaat tgggtggtgta
300
gttggtgtac gtggtatggt tggtgacgat gtaaactatg atgtatcact aggaacacca
360
attaagaaac cagaaggttt tgatacagat acgcgt
396

```

<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

```

Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr
 1             5             10             15
Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp
             20             25             30
Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu
             35             40             45
Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala
             50             55             60
Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

```

```

65          70          75          80
Gly His Val Trp Gly Pro Ser Thr Glu Thr Gln Leu Gly Asn Thr Leu
      85          90          95
Ile Gly Gly Val Val Gly Val Arg Gly Met Val Gly Asp Asp Val Asn
      100          105          110
Tyr Asp Val Ser Leu Gly Thr Pro Ile Lys Lys Pro Glu Gly Phe Asp
      115          120          125
Thr Asp Thr Arg
      130

```

&lt;210&gt; 2569

&lt;211&gt; 330

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2569

```

cttgctgctg gtgctgatgt gtccatgatt ggccagttcg gcgtcggttt ctactctgcc
60
tacctcgctc cccatagagt tgcctgacc accaagcaca acgatgacga gcagtacgtg
120
tgaggagtcac aagcgggagg gtcgttcact gttactcgtg acacgtcagg ggagcagctt
180
ggcaggggca ctaagatcac actgttcctc aaggacgac agctggagta ccttgaggag
240
cgtcgcctca aggatctggt caagaagcac tctgagttca tcagctaccc catctccctg
300
tggaactgaaa agacaacaga gaaggaaatt
330

```

&lt;210&gt; 2570

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2570

```

Leu Ala Ala Gly Ala Asp Val Ser Met Ile Gly Gln Phe Gly Val Gly
1          5          10          15
Phe Tyr Ser Ala Tyr Leu Val Ala Asp Arg Val Val Val Thr Thr Lys
      20          25          30
His Asn Asp Asp Glu Gln Tyr Val Trp Glu Ser Gln Ala Gly Gly Ser
      35          40          45
Phe Thr Val Thr Arg Asp Thr Ser Gly Glu Gln Leu Gly Arg Gly Thr
      50          55          60
Lys Ile Thr Leu Phe Leu Lys Asp Asp Gln Leu Glu Tyr Leu Glu Glu
65          70          75          80
Arg Arg Leu Lys Asp Leu Val Lys Lys His Ser Glu Phe Ile Ser Tyr
      85          90          95
Pro Ile Ser Leu Trp Thr Glu Lys Thr Thr Glu Lys Glu Ile
      100          105          110

```

&lt;210&gt; 2571

&lt;211&gt; 335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2571

gaattcgcca atgttttctc cggatatgggc tccacagtaa cccttatcgg ccgctcccct  
60  
gtgctcctta aacatctcga taatgaacta tctgagctct ttactgagat cgctcgggag  
120  
aaatgggatg tccgttttagg gcaggggaacg acagctatcg accaggtgga gaagcagcgt  
180  
gaagatgggt cttcctactt cgaaaccacc attacatttg aagacggcag cactgttacc  
240  
ggtgacgcat tcctagtgtg taccggacgt acccctaaca ccgaccgcct tggcctcgac  
300  
aatggttccg gtgtgaaggt tgaaagggga cgcgt  
335

&lt;210&gt; 2572

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2572

Glu	Phe	Ala	Asn	Val	Phe	Ser	Gly	Met	Gly	Ser	Thr	Val	Thr	Leu	Ile
1				5				10						15	
Gly	Arg	Ser	Pro	Val	Leu	Leu	Lys	His	Leu	Asp	Asn	Glu	Leu	Ser	Glu
			20					25					30		
Leu	Phe	Thr	Glu	Ile	Ala	Arg	Glu	Lys	Trp	Asp	Val	Arg	Leu	Gly	Gln
		35					40					45			
Gly	Thr	Thr	Ala	Ile	Asp	Gln	Val	Glu	Lys	Gln	Arg	Glu	Asp	Gly	Ser
	50					55					60				
Ser	Tyr	Phe	Glu	Thr	Thr	Ile	Thr	Phe	Glu	Asp	Gly	Ser	Thr	Val	Thr
65					70					75				80	
Gly	Asp	Ala	Phe	Leu	Val	Ala	Thr	Gly	Arg	Thr	Pro	Asn	Thr	Asp	Arg
			85						90					95	
Leu	Gly	Leu	Asp	Asn	Gly	Ser	Gly	Val	Lys	Val	Glu	Arg	Gly	Arg	
			100					105						110	

&lt;210&gt; 2573

&lt;211&gt; 460

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2573

gtcgacaagt accggggcat tgtggttatg gggacggtag atctggggccg tctcgtcagg  
60  
gccggatcca taccggaccg ttctcgtcagg gtggctcggac atcgacgaca ccgcagatgc  
120  
cgagacgacg ttgatacgtc caccggcgcg gtccgtgatc cacgccgtcg tcgccgttgc  
180  
cgccactggc acgatgaggg ccatcaccga gaagagaacg gccaccactc gcagaccacc  
240  
tcgtcccaga agagcgagga cgaaggcgat gacggcgatg accagagccg gtacagccaa  
300  
cgatcccacc agaacggagg agatgaaggt gagggcattg tgtgagggga ggatcgcggc  
360

cactgaccac gccagtaccg gcagggtcag gatcagcccg acgagaccgg aagtgatgcg  
420  
tagccaggaa tgacgggagg ttttcgtgtc agccacgcgt  
460

<210> 2574  
<211> 105  
<212> PRT  
<213> Homo sapiens

<400> 2574  
Met Gly Thr Val Asp Leu Gly Arg Leu Val Arg Ala Gly Ser Ile Pro  
1 5 10 15  
Asp Arg Phe Val Arg Val Val Gly His Arg Arg His Arg Arg Cys Arg  
20 25 30  
Asp Asp Val Asp Thr Ser Thr Gly Ala Val Arg Asp Pro Arg Arg Arg  
35 40 45  
Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn  
50 55 60  
Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly  
65 70 75 80  
Asp Asp Gly Asp Asp Gln Ser Arg Tyr Ser Gln Arg Ser His Gln Asn  
85 90 95  
Gly Gly Asp Glu Gly Glu Gly Ile Val  
100 105

<210> 2575  
<211> 3954  
<212> DNA  
<213> Homo sapiens

<400> 2575  
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60  
ccactctcgc gcctccgaac agccacaggg gcaaagccct gtcacccccca ggatccggtc  
120  
atcagggaaa gaggacaggg agaccagaag agggccagct gggacgaggg ggcggacgcc  
180  
caggaggcaa cttctgagac gcagctcctg agaggggagc ggaccaggcg cgggaggcca  
240  
gagggggcac agagaacaaa cccctcaga agtgaagagg agagcggaag gaaccgagag  
300  
gggacggaca ggagctgagg aggaaagagg aggggagagg ggtcaggcca ggcagccaag  
360  
gagaagacgt gtggccgggg gctatcagaa ggaaactggg acggacgggc cgggctcggg  
420  
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600  
agcctctaca caggttccag tggggccctc agccccgggg ggccccaggc ccagattgcc  
660



ccccggccag ccagccgcca caggaactgg tgtgcctacg tggtagcccg gacagtgage  
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tgtgtccttg aggatggagt ggagacatat gtcaagtacc agccttgtgc ctggggccag  
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2280

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2580  
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2760  
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3180  
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3300  
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3420  
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3660  
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3720  
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3780  
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3840  
tccactggcc ctccaggctc attccctggg ctccaggctc ccccgcgcg ggcggccca  
3900

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3954

<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

Met	Ala	Pro	Arg	Thr	Leu	Trp	Ser	Cys	Tyr	Leu	Cys	Cys	Leu	Leu	Thr
1				5				10					15		
Ala	Ala	Ala	Gly	Ala	Ala	Ser	Tyr	Pro	Pro	Arg	Gly	Phe	Ser	Leu	Tyr
			20					25					30		
Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
		35					40					45			
Ala	Pro	Arg	Pro	Ala	Ser	Arg	His	Arg	Asn	Trp	Cys	Ala	Tyr	Val	Val
	50					55					60				
Thr	Arg	Thr	Val	Ser	Cys	Val	Leu	Glu	Asp	Gly	Val	Glu	Thr	Tyr	Val
65					70					75				80	
Lys	Tyr	Gln	Pro	Cys	Ala	Trp	Gly	Gln	Pro	Gln	Cys	Pro	Gln	Ser	Ile
				85					90					95	
Met	Tyr	Arg	Arg	Phe	Leu	Arg	Pro	Arg	Tyr	Arg	Val	Ala	Tyr	Lys	Thr
				100				105					110		
Val	Thr	Asp	Met	Glu	Trp	Arg	Cys	Cys	Gln	Gly	Tyr	Gly	Gly	Asp	Asp
		115					120					125			
Cys	Ala	Glu	Ser	Pro	Ala	Pro	Ala	Leu	Gly	Pro	Ala	Ser	Ser	Thr	Pro
	130					135					140				
Arg	Pro	Leu	Ala	Arg	Pro	Ala	Arg	Pro	Asn	Leu	Ser	Gly	Ser	Ser	Ala
145					150					155				160	
Gly	Ser	Pro	Leu	Ser	Gly	Leu	Gly	Gly	Glu	Gly	Pro	Gly	Glu	Ser	Glu
				165					170					175	
Lys	Val	Gln	Gln	Leu	Glu	Glu	Gln	Val	Gln	Ser	Leu	Thr	Lys	Glu	Leu
		180						185					190		
Gln	Gly	Leu	Arg	Gly	Val	Leu	Gln	Gly	Leu	Ser	Gly	Arg	Leu	Ala	Glu
	195						200					205			
Asp	Val	Gln	Arg	Ala	Val	Glu	Thr	Ala	Phe	Asn	Gly	Arg	Gln	Gln	Pro
	210					215					220				
Ala	Asp	Ala	Ala	Ala	Arg	Pro	Gly	Val	His	Glu	Thr	Leu	Asn	Glu	Ile
225					230					235				240	
Gln	His	Gln	Leu	Gln	Leu	Leu	Asp	Thr	Arg	Val	Ser	Thr	His	Asp	Gln
			245						250					255	
Glu	Leu	Gly	His	Leu	Asn	Asn	His	His	Gly	Gly	Ser	Ser	Ser	Ser	Gly
		260					265					270			
Gly	Ser	Arg	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Pro	Gly	Pro	Ser	Glu
	275					280						285			
Glu	Leu	Leu	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Glu	Ser	Cys	Ser	Val
	290					295					300				
Cys	Leu	Ala	Gly	Leu	Asp	Gly	Phe	Arg	Arg	Gln	Gln	Gln	Glu	Asp	Arg
305					310					315				320	
Glu	Arg	Leu	Arg	Ala	Met	Glu	Lys	Leu	Leu	Ala	Ser	Val	Glu	Glu	Arg
			325						330					335	
Gln	Arg	His	Leu	Ala	Gly	Leu	Ala	Val	Gly	Arg	Arg	Pro	Pro	Gln	Glu
		340						345					350		
Cys	Cys	Ser	Pro	Glu	Leu	Gly	Arg	Arg	Leu	Ala	Glu	Leu	Glu	Arg	Arg

355 360 365  
Leu Asp Val Val Ala Gly Ser Val Thr Val Leu Ser Gly Arg Arg Gly  
370 375 380  
Thr Glu Leu Gly Gly Ala Ala Gly Gln Gly Gly His Pro Pro Gly Tyr  
385 390 395 400  
Thr Ser Leu Ala Ser Arg Leu Ser Arg Leu Glu Asp Arg Phe Asn Ser  
405 410 415  
Thr Leu Gly Pro Ser Glu Glu Gln Glu Glu Ser Trp Pro Gly Ala Pro  
420 425 430  
Gly Gly Leu Ser His Trp Leu Pro Ala Ala Arg Gly Arg Leu Glu Gln  
435 440 445  
Leu Gly Gly Leu Leu Ala Asn Val Ser Gly Glu Leu Gly Gly Arg Leu  
450 455 460  
Asp Leu Leu Glu Glu Gln Val Ala Gly Ala Met Gln Ala Cys Gly Gln  
465 470 475 480  
Leu Cys Ser Gly Ala Pro Gly Glu Gln Asp Ser Gln Val Ser Glu Ile  
485 490 495  
Leu Ser Ala Leu Glu Arg Arg Val Leu Asp Ser Glu Gly Gln Leu Arg  
500 505 510  
Leu Val Gly Ser Gly Leu His Thr Val Glu Ala Ala Gly Glu Ala Arg  
515 520 525  
Gln Ala Thr Leu Glu Gly Leu Gln Glu Val Val Gly Arg Leu Gln Asp  
530 535 540  
Arg Val Asp Ala Gln Asp Glu Thr Ala Ala Glu Phe Thr Leu Arg Leu  
545 550 555 560  
Asn Leu Thr Ala Ala Arg Leu Gly Gln Leu Glu Gly Leu Leu Gln Ala  
565 570 575  
His Gly Asp Glu Gly Cys Gly Ala Cys Gly Gly Val Gln Glu Glu Leu  
580 585 590  
Gly Arg Leu Arg Asp Gly Val Glu Arg Cys Ser Cys Pro Leu Leu Pro  
595 600 605  
Pro Arg Gly Pro Gly Ala Gly Pro Gly Val Gly Gly Pro Ser Arg Gly  
610 615 620  
Pro Leu Asp Gly Phe Ser Val Phe Gly Gly Ser Ser Gly Ser Ala Leu  
625 630 635 640  
Gln Ala Leu Gln Gly Glu Leu Ser Glu Val Ile Leu Ser Phe Ser Ser  
645 650 655  
Leu Asn Asp Ser Leu Asn Glu Leu Gln Thr Thr Val Glu Gly Gln Gly  
660 665 670  
Ala Asp Leu Ala Asp Leu Gly Ala Thr Lys Asp Arg Ile Ile Ser Glu  
675 680 685  
Ile Asn Arg Leu Gln Gln Glu Ala Thr Glu His Ala Thr Glu Ser Glu  
690 695 700  
Glu Arg Phe Arg Gly Leu Glu Glu Gly Gln Ala Gln Ala Gly Gln Cys  
705 710 715 720  
Pro Ser Leu Glu Gly Arg Leu Gly Arg Leu Glu Gly Val Cys Glu Arg  
725 730 735  
Leu Asp Thr Val Ala Gly Gly Leu Gln Gly Leu Arg Glu Gly Leu Ser  
740 745 750  
Arg His Val Ala Gly Leu Trp Ala Gly Leu Arg Glu Thr Asn Thr Thr  
755 760 765  
Ser Gln Met Gln Ala Ala Leu Leu Glu Lys Leu Val Gly Gly Gln Ala  
770 775 780  
Gly Leu Gly Arg Arg Leu Gly Ala Leu Asn Ser Ser Leu Gln Leu Leu

785                      790                      795                      800  
 Glu Asp Arg Leu His Gln Leu Ser Leu Lys Asp Leu Thr Gly Pro Ala  
                                  805                      810                      815  
 Gly Glu Ala Gly Pro Pro Gly Pro Pro Gly Leu Gln Gly Pro Pro Gly  
                                  820                      825                      830  
 Pro Ala Gly Pro Pro Gly Ser Pro Gly Lys Asp Gly Gln Glu Gly Pro  
                                  835                      840                      845  
 Ile Gly Pro Pro Gly Pro Gln Gly Glu Gln Gly Val Glu Gly Ala Pro  
                                  850                      855                      860  
 Ala Ala Pro Val Pro Gln Val Ala Phe Ser Ala Ala Leu Ser Leu Pro  
 865                      870                      875                      880  
 Arg Ser Glu Pro Gly Thr Val Pro Phe Asp Arg Val Leu Leu Asn Asp  
                                  885                      890                      895  
 Gly Gly Tyr Tyr Asp Pro Glu Thr Gly Val Phe Thr Ala Pro Leu Ala  
                                  900                      905                      910  
 Gly Arg Tyr Leu Leu Ser Ala Val Leu Thr Gly His Arg His Glu Lys  
                                  915                      920                      925  
 Val Glu Ala Val Leu Ser Arg Ser Asn Gln Gly Val Ala Arg Val Asp  
                                  930                      935                      940  
 Ser Gly Gly Tyr Glu Pro Glu Gly Leu Glu Asn Lys Pro Val Ala Glu  
 945                      950                      955                      960  
 Ser Gln Pro Ser Pro Gly Thr Leu Gly Val Phe Ser Leu Ile Leu Pro  
                                  965                      970                      975  
 Leu Gln Ala Gly Asp Thr Val Cys Val Asp Leu Val Met Gly Gln Leu  
                                  980                      985                      990  
 Ala His Ser Glu Glu Pro Leu Thr Ile Phe Ser Gly Ala Leu Leu Tyr  
                                  995                      1000                      1005  
 Gly Asp Pro Glu Leu Glu His Ala  
                                  1010                      1015

<210> 2577  
 <211> 343  
 <212> DNA  
 <213> Homo sapiens

<400> 2577  
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 120  
 tgctgagcaa attacgaggg tcaacaggag cagggcagac gcttctccca cctgctggcc  
 180  
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 343

<210> 2578  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2578

```

Met Ala Ser Trp Ala Ser Arg Arg Ser Trp Gly Trp Gly Gly Gly Val
 1           5           10           15
Val His Ser Ser Pro Ala Ala Ala Asp Leu Glu Pro Ser Val Ala Lys
           20           25           30
Cys Leu Leu Ser Lys Leu Arg Gly Ser Thr Gly Ala Gly Gln Thr Leu
           35           40           45
Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro
           50           55           60
Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln
65           70           75           80
Trp Gly Leu Gly Ala Ser Gln Gly Gln His Glu Pro Leu Ala Arg Val
           85           90           95
Ser Asn Arg Pro
           100

```

&lt;210&gt; 2579

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2579

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420

```

&lt;210&gt; 2580

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2580

```

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Val Phe Ser Tyr Gly Ser Met Phe Tyr Ser Val His Gln Ser Ala Ile
           20           25           30
Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala
           35           40           45
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro
           50           55           60
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly
65           70           75           80
Thr Ile Thr Ser Trp Val Val Ile Phe Ile Leu Pro Ile Asn Ser Ala

```

85 90 95  
 Leu Asn Pro Ile Leu Tyr Thr Leu Thr Thr Arg Pro Phe Lys Glu Met  
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 Ile His Arg Phe Trp Tyr Asn Tyr Arg Gln Arg Lys Ser Met Asp Ser  
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 Lys Gly Gln Lys Thr Glu Ala Gly Val Cys Ser Arg  
 130 135 140

&lt;210&gt; 2581

&lt;211&gt; 459

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2581

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 459

&lt;210&gt; 2582

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2582

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 Ser Gln Leu Arg Arg Pro Val His Val Arg Ala Glu Gly Ala Asp Thr  
 20 25 30  
 Gln Thr Thr Val Pro Asp Thr Gln Gln Phe Val Tyr Gln Ala His Ser  
 35 40 45  
 Leu Asp Lys Ile Glu Ile Ile Gly Arg Ile Leu Gln Ala Asn Asp Val  
 50 55 60  
 Glu Lys Val Ile Ile Phe Cys Arg Thr Lys Arg Ala Cys Gln Arg Leu  
 65 70 75 80  
 Ser Asp Asp Leu Asp Asp Arg Gly Phe Lys Thr Arg Ala Ile His Gly  
 85 90 95  
 Asp Leu Thr Gln Val Ala Arg Glu Lys Ala Leu Lys Lys Phe Arg His  
 100 105 110  
 Gly Glu Ala Thr Ile Leu Val Ala Thr Asp Val Ala Ala Arg Gly Ile  
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<212> DNA  
<213> Homo sapiens

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120  
ctcatcatcc ttccaaactt gtggtggaac agggttttct tccctgtctg tgtattttga  
180  
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240  
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300  
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&lt;210&gt; 2584

&lt;211&gt; 1186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2584

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Asp	Lys	Gln	Pro	Gln	Glu	Pro	Ala	Pro	Lys	Arg	Lys	Pro	Phe	Ala	Val	65	70	75	80
Lys	Ala	Asp	Ser	Ser	Ser	Val	Asp	Glu	Cys	Asp	Asp	Ser	Asp	Gly	Thr	85	90	95	
Glu	Asp	Met	Asp	Glu	Lys	Glu	Glu	Asp	Glu	Gly	Glu	Glu	Tyr	Ser	Glu	100	105	110	
Asp	Asn	Asp	Glu	Pro	Gly	Asp	Glu	Asp	Glu	Glu	Asp	Glu	Glu	Gly	Asp				

115 120 125  
Arg Glu Gly Glu Glu Glu Ile Glu Glu Glu Asp Glu Asp Asp Asp Glu  
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Asp Gly Glu Asp Val Glu Asp Glu Glu Glu Glu Glu Glu Glu Glu  
145 150 155 160  
Glu Glu Glu Glu Glu Glu Glu Asn Glu Asp His Gln Met Asn Cys His  
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Asn Thr Arg Ile Met Gln Asp Thr Glu Lys Asp Asp Asn Asn Ser Asp  
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Gly Lys Ile Ala Glu Asp Ala Ala Tyr Arg Ala Arg Thr Glu Ser Glu  
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Pro Met Asn Asn Gly Leu Met Glu Lys Met Val Glu Glu Ser Asp Glu  
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Glu Val Cys Leu Ser Ser Leu Glu Cys Leu Arg Asn Gln Cys Phe Asp  
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Arg Glu Lys Met Ala Met Glu Ala Gly Arg Arg Asp Asn Met Arg Ser  
450 455 460  
Tyr Glu Asp Gln Ser Pro Arg Gln Leu Pro Gly Glu Asp Arg Lys Pro  
465 470 475 480  
Lys Ser Ser Asp Ser His Val Lys Lys Pro Tyr Tyr Gly Lys Asp Pro  
485 490 495  
Ser Arg Thr Glu Lys Lys Glu Ser Lys Cys Pro Thr Pro Gly Cys Asp  
500 505 510  
Gly Thr Gly His Val Thr Gly Leu Tyr Pro His His Arg Ser Leu Ser  
515 520 525  
Gly Cys Pro His Lys Asp Arg Val Pro Pro Glu Ile Leu Ala Met His  
530 535 540  
Glu Ser Val Leu Lys Cys Pro Thr Pro Gly Cys Thr Gly Arg Gly His

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Asp	Val	Ser	Lys	Ser	Ser	Gln	Ala	Ser	Asp	Arg	Val	Leu	Arg	Pro	Met
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Tyr	Ser	Lys	Thr	Ser	Phe	Glu	Tyr	Asn	Ser	Tyr	Asp	Asn	His	Thr	Tyr
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Gly	Lys	Arg	Ala	Ile	Ala	Pro	Lys	Val	Gln	Thr	Arg	Asp	Ile	Ser	Pro
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Lys	Gly	Tyr	Asp	Asp	Ala	Lys	Arg	Tyr	Cys	Lys	Asp	Pro	Ser	Pro	Ser
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Cys	Gly	Gly	Gly	Ser	Ser	Ala	Ser	Ser	Thr	Cys	Ser	Lys	Ser	Ser	Phe
705					710					715					720
Asp	Tyr	Thr	His	Asp	Met	Glu	Ala	Ala	His	Met	Ala	Ala	Thr	Ala	Ile
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Leu	Asn	Leu	Ser	Thr	Arg	Cys	Arg	Glu	Met	Pro	Gln	Asn	Leu	Ser	Thr
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Lys	Pro	Gln	Asp	Leu	Cys	Ala	Thr	Arg	Asn	Pro	Asp	Met	Glu	Val	Asp
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Glu	Asn	Gly	Thr	Leu	Asp	Leu	Ser	Met	Asn	Lys	Gln	Arg	Pro	Arg	Asp
	770				775						780				
Ser	Cys	Cys	Pro	Ile	Leu	Thr	Pro	Leu	Glu	Pro	Met	Ser	Pro	Gln	Gln
785					790					795					800
Gln	Ala	Val	Met	Asn	Asn	Arg	Cys	Phe	Gln	Leu	Gly	Glu	Gly	Asp	Cys
				805					810					815	
Trp	Asp	Leu	Pro	Val	Asp	Tyr	Thr	Lys	Met	Lys	Pro	Arg	Arg	Ile	Asp
			820					825					830		
Glu	Asp	Glu	Ser	Lys	Asp	Ile	Thr	Pro	Glu	Asp	Leu	Asp	Pro	Phe	Gln
		835				840						845			
Glu	Ala	Leu	Glu	Glu	Arg	Arg	Tyr	Pro	Gly	Glu	Val	Thr	Ile	Pro	Ser
	850					855					860				
Pro	Lys	Pro	Lys	Tyr	Pro	Gln	Cys	Lys	Glu	Ser	Lys	Lys	Asp	Leu	Ile
865					870					875					880
Thr	Leu	Ser	Gly	Cys	Pro	Leu	Ala	Asp	Lys	Ser	Ile	Arg	Ser	Met	Leu
				885					890					895	
Ala	Thr	Ser	Ser	Gln	Glu	Leu	Lys	Cys	Pro	Thr	Pro	Gly	Cys	Asp	Gly
			900					905					910		
Ser	Gly	His	Ile	Thr	Gly	Asn	Tyr	Ala	Ser	His	Arg	Ser	Leu	Ser	Gly
		915					920					925			
Cys	Pro	Arg	Ala	Lys	Lys	Ser	Gly	Ile	Arg	Ile	Ala	Gln	Ser	Lys	Glu
	930					935					940				
Asp	Lys	Glu	Asp	Gln	Glu	Pro	Ile	Arg	Cys	Pro	Val	Pro	Gly	Cys	Asp
945					950					955					960
Gly	Gln	Gly	His	Ile	Thr	Gly	Lys	Tyr	Ala	Ser	His	Arg	Ser	Ala	Ser
				965					970					975	
Gly	Cys	Pro	Leu	Ala	Ala	Lys	Arg	Gln	Lys	Asp	Gly	Tyr	Leu	Asn	Gly

980 985 990  
 Ser Gln Phe Ser Trp Lys Ser Val Lys Thr Glu Gly Met Ser Cys Pro  
 995 1000 1005  
 Thr Pro Gly Cys Asp Gly Ser Gly His Val Ser Gly Ser Phe Leu Thr  
 1010 1015 1020  
 His Arg Ser Leu Ser Gly Cys Pro Arg Ala Thr Ser Ala Met Lys Lys  
 1025 1030 1035 1040  
 Ala Lys Leu Ser Gly Glu Gln Met Leu Thr Ile Lys Gln Arg Ala Ser  
 1045 1050 1055  
 Asn Gly Ile Glu Asn Asp Glu Glu Ile Lys Gln Leu Asp Glu Glu Ile  
 1060 1065 1070  
 Lys Glu Leu Asn Glu Ser Asn Ser Gln Met Glu Ala Asp Met Ile Lys  
 1075 1080 1085  
 Leu Arg Thr Gln Ile Thr Thr Met Glu Ser Asn Leu Lys Thr Ile Glu  
 1090 1095 1100  
 Glu Glu Asn Lys Val Ile Glu Gln Gln Asn Glu Ser Leu Leu His Glu  
 1105 1110 1115 1120  
 Leu Ala Asn Leu Ser Gln Ser Leu Ile His Ser Leu Ala Asn Ile Gln  
 1125 1130 1135  
 Leu Pro His Met Asp Pro Ile Asn Glu Gln Asn Phe Asp Ala Tyr Val  
 1140 1145 1150  
 Thr Thr Leu Thr Glu Met Tyr Thr Asn Gln Asp Arg Tyr Gln Ser Pro  
 1155 1160 1165  
 Glu Asn Lys Ala Leu Leu Glu Asn Ile Lys Gln Ala Val Arg Gly Ile  
 1170 1175 1180  
 Gln Val  
 1185

<210> 2585  
 <211> 542  
 <212> DNA  
 <213> Homo sapiens

<400> 2585  
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 60  
 ccaagagccc agggatcgcc tcgctgacag accccaaaac acggggccacg ccaccccgtc  
 120  
 ctctaggtac ctgtgcccc agtctcaagc atcactccgt gtctccctca catgccttct  
 180  
 gggcctctag ccctcaaaga gctaaagtat gtgagcactt tctcagccct ttaaaccgat  
 240  
 taagtcattg catcctcaca aggctgctgt gttttattac ctctgtttca ggtgcaagtc  
 300  
 atccccggga ggagtgggtgg ggatgccgcc tgaccctggg ccacctgggt gcagcatctg  
 360  
 tgttgatgac caccctcctg cctcaggctt tgctcctgaa tgttcttgct ctctaggtct  
 420  
 gtcgctcct ggcctgctc ttcttaactc cgttcaagcc cctgggtca cacgtccatg  
 480  
 ctcactactt caatgacgcg gatgctggcg atccccaaat ctctaatcc aagtgcagat  
 540  
 ct  
 542



<210> 2586  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 2586  
 Met Pro Ser Pro Ala Lys Ser Pro Gly Ile Ala Ser Leu Thr Asp Pro  
 1 5 10 15  
 Lys Thr Arg Ala Thr Pro Pro Arg Pro Leu Gly Thr Cys Ala Pro Ser  
 20 25 30  
 Leu Lys His His Ser Val Ser Pro Ser His Ala Phe Trp Ala Ser Ser  
 35 40 45  
 Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly  
 50 55 60  
 Leu Ser His Val Ile Leu Thr Arg Leu Leu Cys Phe Ile Thr Ser Val  
 65 70 75 80  
 Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr  
 85 90 95  
 Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro  
 100 105 110  
 Gln Ala Leu Leu Leu Asn Val Leu Ala Leu  
 115 120

<210> 2587  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 2587  
 ncgaatatcc atgcagcgat cccgggcgga atgctctcca acatggagtc ccagcttgag  
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 gcccgaggcg ctggagaccg catggatgag gtcataaagg aggtgccgcg cgttcgtaag  
 120  
 gatgccggct acccgccgct ggtaaccccg tcgtcccaga tcgtgggaac ccaggcgggtg  
 180  
 ttcaacgtct tgatgggcaa tggttcgtac aagaatctca ctgccgagtt tgccgacctc  
 240  
 atgctcggct actacggcaa gccattggc gagctcaatc ctgagatcgt cgagatggcc  
 300  
 aagaagcaga ccggcaagga gccgatcgac tgccgtcccg ccgacttgct cgagcctgag  
 360  
 tgggatcagt tggtcgagca ggccaagagt cttgagggtc tcgacggctc cgacgaggac  
 420  
 gttcttacca acgcg  
 435

<210> 2588  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 2588  
 Xaa Asn Ile His Ala Ala Ile Pro Gly Gly Met Leu Ser Asn Met Glu



1 5 10 15  
 Ser Gln Leu Glu Ala Gln Gly Ala Gly Asp Arg Met Asp Glu Val Met  
 20 25 30  
 Lys Glu Val Pro Arg Val Arg Lys Asp Ala Gly Tyr Pro Pro Leu Val  
 35 40 45  
 Thr Pro Ser Ser Gln Ile Val Gly Thr Gln Ala Val Phe Asn Val Leu  
 50 55 60  
 Met Gly Asn Gly Ser Tyr Lys Asn Leu Thr Ala Glu Phe Ala Asp Leu  
 65 70 75 80  
 Met Leu Gly Tyr Tyr Gly Lys Pro Ile Gly Glu Leu Asn Pro Glu Ile  
 85 90 95  
 Val Glu Met Ala Lys Lys Gln Thr Gly Lys Glu Pro Ile Asp Cys Arg  
 100 105 110  
 Pro Ala Asp Leu Leu Glu Pro Glu Trp Asp Gln Leu Val Glu Gln Ala  
 115 120 125  
 Lys Ser Leu Glu Gly Phe Asp Gly Ser Asp Glu Asp Val Leu Thr Asn  
 130 135 140  
 Ala  
 145

&lt;210&gt; 2589

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2589

ccggcgaaga aggacatggc catggtcttc ggcgcgactc attacgtcga cccgacggcc  
 60  
 ggcgatccgg ttgagcagat cagagcgctg accagggggc gcggcgctcga tttcgcgac  
 120  
 gaggtcgctc gcatcgctcga ggtcatggag caggcctact gggcggcgcg acgcggcggc  
 180  
 acgatcgtct acgtcggggc gctgggcatc gacgccaaagc tggctctgcc ggcgaacgac  
 240  
 ctgcacggcg gcgccaagac gatcatcggc tgcgccaacg gattgggccc agtgcgcacc  
 300  
 gactatgccca agatgatctc gctggtcgag accggacggc tggacctggg cgggatgatc  
 360  
 acgcgt  
 366

&lt;210&gt; 2590

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2590

Pro Ala Lys Lys Asp Met Ala Met Val Phe Gly Ala Thr His Tyr Val  
 1 5 10 15  
 Asp Pro Thr Ala Gly Asp Pro Val Glu Gln Ile Arg Ala Leu Thr Arg  
 20 25 30  
 Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val  
 35 40 45  
 Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr

50 Val Gly Ala Leu Gly Ile 55 Asp Ala Lys Leu Val 60 Leu Pro Ala Asn Asp  
 65 Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly 80  
 85 Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly 95  
 100 Arg Leu Asp Leu Gly Gly Met Ile Thr Arg 110  
 115 120

<210> 2591  
 <211> 341  
 <212> DNA  
 <213> Homo sapiens

<400> 2591  
 acgcgtaaag gcatgacctc accttatcat cagggtcaca cgtgtgttat tctggggctg  
 60 agcagccac gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct  
 120 tcctgctcca gggcaggccc tgggcagggc aatgctgggg acacgggtggg gagtaggcca  
 180 cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa  
 240 ggggtgaccc tgcactcgag gctcctggga agacggggag ggttgaggtt acatgaggga  
 300 gaggggtcag ttggtgcatt cacagaacag cagggtggcc a  
 341

<210> 2592  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2592  
 Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu  
 1 5 10 15  
 Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met  
 20 25 30  
 Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala  
 35 40 45  
 Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr  
 50 55 60  
 Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu  
 65 70 75 80  
 His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly  
 85 90 95  
 Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly  
 100 105

<210> 2593  
 <211> 501  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2593

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 60  
 gcgctttcat ggggttttat ggaggtggat gaatatgagg cggatgatat tatcggtacc  
 120  
 ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc  
 180  
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg  
 240  
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa  
 300  
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg  
 360  
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggatttat  
 420  
 aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca  
 480  
 gctgagatgt ctcttaagct t  
 501

&lt;210&gt; 2594

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2594

Arg	Val	Arg	Pro	Pro	Glu	Asp	Phe	Tyr	Ala	Gln	Ile	Pro	Leu	Leu	Arg
1				5					10					15	
Glu	Leu	Ile	Ser	Ala	Leu	Ser	Trp	Gly	Phe	Met	Glu	Val	Asp	Glu	Tyr
			20					25					30		
Glu	Ala	Asp	Asp	Ile	Ile	Gly	Thr	Leu	Ala	Arg	Gln	Ala	Asp	Glu	Ala
		35				40					45				
Gly	Asp	Tyr	Met	Thr	Tyr	Ile	Val	Ser	Ser	Asp	Leu	Asp	Met	Leu	Gln
	50					55					60				
Ile	Val	Asp	Glu	Asn	Thr	Lys	Met	Tyr	Arg	Ile	Leu	Arg	Gly	Phe	Ser
65				70					75					80	
Asp	Leu	Glu	Glu	Met	Asp	Thr	Pro	Ala	Ile	Glu	Glu	Lys	Tyr	Gly	Ile
			85					90					95		
Leu	Lys	Ser	Gln	Phe	Leu	Asp	Leu	Lys	Ala	Leu	Lys	Gly	Asp	Asn	Ser
			100					105					110		
Asp	Asn	Ile	Pro	Gly	Val	Pro	Gly	Ile	Gly	Glu	Lys	Thr	Ala	Val	Lys
		115					120					125			
Leu	Leu	Asn	Glu	Tyr	Gly	Ser	Leu	Glu	Gly	Ile	Tyr	Asn	His	Ile	Lys
	130					135					140				
Glu	Ile	Ser	Gly	Ala	Thr	Gln	Lys	Lys	Leu	Ile	Ala	Gly	Arg	Glu	Ser
145				150					155					160	
Ala	Glu	Met	Ser	Leu	Lys	Leu									

&lt;210&gt; 2595

&lt;211&gt; 928

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 2595  
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 60  
 cccccccag ggatacctgt aatacctgct tcccacttca tgggctacaa tctcatgctg  
 120  
 gtcacaattt ctggggctca ctcataaac accaacaat gggatatttg tgaagaactt  
 180  
 cgccctgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg  
 240  
 tgggtggctcg actgcactgc caactggaga gaaaaatgga gtaaagtctg agctgaaagg  
 300  
 aacagtgccg gaaaggaagg aagacaactc agaataaac tagagatggc gatgaaagaa  
 360  
 tcggatccac tgaaacagaa acagagtttg ccacttcaga aggaggcatt agaagctaat  
 420  
 gttacccagg atctgaagct tcctggcttc gtagaagaat cctgtgaaca tacagaccaa  
 480  
 tttcaattga gttcacaat gcatgagtct atcagagagt atttggtaaa aagacaattt  
 540  
 tctacaaagg aggacacaaa taataaggaa caaggtgtgg ttattgattc tctaaaatta  
 600  
 agtgaggaga tgaagcccaa tctagatggg gttgatttat tcaacaatgg tggttctgga  
 660  
 aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa  
 720  
 gtaactgaaa tttcagcttt gcaggtgcat ttggatgaat tccaaaaaat cttatggaag  
 780  
 gaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct  
 840  
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt  
 900  
 gacattcttc ttggtcaaca taatgatg  
 928

<210> 2596  
 <211> 309  
 <212> PRT  
 <213> Homo sapiens

<400> 2596  
 Arg Ser Ser Arg Cys Asn Asn Asp Gln Leu Arg His Ala Ala Thr Trp  
 1 5 10 15  
 Trp Pro Leu Pro His Pro Pro Gly Ile Pro Val Ile Pro Ala Ser His  
 20 25 30  
 Phe Met Gly Tyr Asn Leu Met Leu Val Thr Ile Ser Gly Ala His Ser  
 35 40 45  
 Tyr Asn Thr Asn Lys Trp Asp Ile Cys Glu Glu Leu Arg Leu Arg Glu  
 50 55 60  
 Leu Glu Glu Val Lys Ala Arg Ala Ala Gln Met Glu Lys Thr Met Arg  
 65 70 75 80  
 Trp Trp Ser Asp Cys Thr Ala Asn Trp Arg Glu Lys Trp Ser Lys Val  
 85 90 95  
 Arg Ala Glu Arg Asn Ser Ala Gly Lys Glu Gly Arg Gln Leu Arg Ile

```

      100      105      110
Lys Leu Glu Met Ala Met Lys Glu Ser Asp Pro Leu Lys Gln Lys Gln
      115      120      125
Ser Leu Pro Leu Gln Lys Glu Ala Leu Glu Ala Asn Val Thr Gln Asp
      130      135      140
Leu Lys Leu Pro Gly Phe Val Glu Glu Ser Cys Glu His Thr Asp Gln
145      150      155      160
Phe Gln Leu Ser Ser Gln Met His Glu Ser Ile Arg Glu Tyr Leu Val
      165      170      175
Lys Arg Gln Phe Ser Thr Lys Glu Asp Thr Asn Asn Lys Glu Gln Gly
      180      185      190
Val Val Ile Asp Ser Leu Lys Leu Ser Glu Glu Met Lys Pro Asn Leu
      195      200      205
Asp Gly Val Asp Leu Phe Asn Asn Gly Gly Ser Gly Asn Gly Glu Thr
      210      215      220
Lys Thr Gly Leu Arg Leu Lys Ala Ile Asn Leu Pro Leu Glu Asn Glu
225      230      235      240
Val Thr Glu Ile Ser Ala Leu Gln Val His Leu Asp Glu Phe Gln Lys
      245      250      255
Ile Leu Trp Lys Glu Arg Glu Met Arg Thr Ala Leu Glu Lys Glu Ile
      260      265      270
Glu Arg Leu Glu Ser Ala Leu Ser Leu Trp Lys Trp Lys Tyr Glu Glu
      275      280      285
Leu Lys Glu Ser Lys Pro Lys Asn Val Lys Glu Phe Asp Ile Leu Leu
      290      295      300
Gly Gln His Asn Asp
305

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&lt;210&gt; 2597

&lt;211&gt; 631

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2597

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ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
60
ggctgcacct gcagctgagg gttagcagga attaggagat aacagtagaa tagggctaga
120
ctgaaaaggc ctttgatgcc aggttaggaa atttacattt tatccacaaa atccaaatcc
180
tcctttaata atgagatgtc ttacaagtt tttgggcaag agtggtatgg ctgacctggt
240
gtcctgggaa ggaactgtgt ggggatggtg tgcaggactt acctaggggtg ggaaaggcac
300
aagcagcatg gggctgtggc agctaccaga ggtaaaggga catttcaggg aaagacttgg
360
caggacaaga ccttccttgg atggatggat gaataccaga aacagggacc caagagaaag
420
gccgagtttc atagggagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
480
ggtgagacgt ccagtcgaca gtactacca ctggccagtg agaaatgtgg gaccagggtt
540
caggaggaaa ctggggccgg aaatgagcat ttggaaggcg ccagggtgga agcgggtggt
600

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tcactccacg agtgctattt cacttacgcg t  
631

<210> 2598

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2598

Met	Gly	Leu	Trp	Gln	Leu	Pro	Glu	Val	Lys	Gly	His	Phe	Arg	Glu	Arg
1				5					10					15	
Leu	Gly	Arg	Thr	Arg	Pro	Ser	Leu	Asp	Gly	Trp	Met	Asn	Thr	Arg	Asn
			20					25					30		
Arg	Asp	Pro	Arg	Glu	Arg	Pro	Ser	Phe	Ile	Gly	Arg	Glu	Asp	Gly	Ser
		35					40					45			
Cys	Met	Arg	His	Val	Glu	Leu	Val	Leu	Met	Val	Arg	Arg	Pro	Val	Asp
	50					55				60					
Ser	Thr	Thr	His	Trp	Pro	Val	Arg	Asn	Val	Gly	Pro	Gly	Phe	Arg	Arg
65					70					75				80	
Lys	Leu	Gly	Pro	Glu	Met	Ser	Ile	Trp	Lys	Ala	Pro	Gly	Trp	Lys	Arg
				85					90					95	
Val	Val	His	Ser	Thr	Ser	Ala	Ile	Ser	Leu	Thr	Arg				
			100						105						

<210> 2599

<211> 356

<212> DNA

<213> Homo sapiens

<400> 2599

nagatccttat acagggacgt gatggttgag aactactgga accttgtttc tctgggactg  
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tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg  
120  
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc  
180  
acagatatcc ctccctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca  
240  
gaagcagtat tccacacagt ggtggttgaa agacacgaaa gccctgacat tgaagacttt  
300  
tccttcaagg aaccccagaa aaatgtgcat gattttgagt gtcaatggag agatgn  
356

<210> 2600

<211> 118

<212> PRT

<213> Homo sapiens

<400> 2600

Xaa	Ile	Leu	Tyr	Arg	Asp	Val	Met	Leu	Glu	Asn	Tyr	Trp	Asn	Leu	Val
1				5					10					15	
Ser	Leu	Gly	Leu	Cys	His	Phe	Asp	Met	Asn	Ile	Ile	Ser	Met	Leu	Glu
			20					25					30		
Glu	Gly	Lys	Glu	Pro	Trp	Thr	Val	Lys	Ser	Cys	Val	Lys	Ile	Ala	Arg

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      35      40      45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
      50      55      60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
65      70      75      80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
      85      90      95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
      100      105      110
Glu Cys Gln Trp Arg Asp
      115

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<210> 2601

<211> 329

<212> DNA

<213> Homo sapiens

<400> 2601

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gcgccgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgccc
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tacttggtaca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cggtgggtggg
120
gtcacgcct tcggcttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcgaaggc
180
ttgatgcct tgcccgaaga cctcggtatc cgccgcaccg acgccaccg cgaactgttg
240
gccgccaaga gcgtggccga cctggtggag tggccgggtg gcttggtgcaa cccgcccgcc
300
aagttcagga gctggtaaata gcgcgcctt
329

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<210> 2602

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2602

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Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
  1      5      10      15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
      20      25      30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
      35      40      45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
      50      55      60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
65      70      75      80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
      85      90      95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
      100      105

```

<210> 2603

<211> 423

<212> DNA

<213> Homo sapiens

<400> 2603

tcatgatcca ttgctctacc ctttacgggt gtgcacctac gcccagggtc gtggtcagga  
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gcatcgggttc ggtgggtaccg aggtcgagga cttccttcac gccgttggtc gcggagggca  
120  
ggttgtggta agtggtcagg tgggccacga tctgggcact gatcacctcg gtgaaatcga  
180  
agctctgggt accctgagcg gtcgccgaca cgacacggtc cacaccggag accagaccga  
240  
tctcggagat gatcgcgtaa ccttcattgt cgtagaggat cttgcacgca tcgatgatgc  
300  
gcttgatctc cttggcagtg aagatgattt ccatcggggg gttggccgac agatactgac  
360  
cggagctggg ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttgtccg  
420  
cgg  
423

<210> 2604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2604

Met	Glu	Ile	Ile	Phe	Thr	Ala	Lys	Glu	Ile	Lys	Arg	Ile	Ile	Asp	Ala	
1				5				10						15		
Cys	Lys	Ile	Leu	Tyr	Asp	Asn	Glu	Gly	Tyr	Ala	Ile	Ile	Ser	Glu	Ile	
			20					25					30			
Gly	Leu	Val	Ser	Gly	Val	Asp	Arg	Val	Val	Ser	Ala	Thr	Ala	Gln	Gly	
		35				40						45				
Asn	Gln	Ser	Phe	Asp	Phe	Thr	Glu	Val	Ile	Ser	Ala	Gln	Ile	Val	Ala	
	50					55					60					
His	Leu	Thr	Thr	Tyr	His	Asn	Leu	Pro	Ser	Ala	Asn	Asn	Gly	Val	Lys	
65				70					75					80		
Glu	Val	Leu	Asp	Leu	Gly	Thr	Thr	Glu	Pro	Met	Leu	Leu	Thr	Thr	Asp	
			85					90						95		
Leu	Gly	Val	Gly	Ala	Gln	Pro										
			100													

<210> 2605

<211> 354

<212> DNA

<213> Homo sapiens

<400> 2605

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60  
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120  
tttgcattgt gggacctgtt ccactttcaa aatgtgtcat ttggaagga aaggaggaa  
180



caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aaggttgccc  
 240  
 caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcacaaat  
 300  
 ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gagc  
 354

<210> 2606  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 2606  
 Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln  
 1 5 10 15  
 Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe  
 20 25 30  
 Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys  
 35 40 45  
 His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val  
 50 55 60  
 Ser Met Ser Pro Phe Ser Ser Ala Glu Gly Cys Pro Lys Val Pro Pro  
 65 70 75 80  
 Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met  
 85 90 95  
 Gly His Pro Gly Leu  
 100

<210> 2607  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

<400> 2607  
 tgatcaagaa caatgatacg atatcctaac caacagagga agcaacggaa gttgttggtg  
 60  
 tttttatgct gttttttttt tttgagaacg gatcttgccc ctgccccag gccggaatgg  
 120  
 atgacatgga cagaaccccc tcggaaaaaa gccggaatgt gcaaaccxaa attcccacca  
 180  
 cacggggggc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa  
 240  
 actttttttt ttttaaannn anacccccaa aaaaaccaa aaaaaaatt taaaaaa  
 297

<210> 2608  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 2608  
 Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu  
 1 5 10 15  
 Phe Leu Cys Cys Phe Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro

		20						25					30				
Arg	Pro	Glu	Trp	Met	Thr	Trp	Thr	Glu	Pro	Arg	Arg	Lys	Lys	Ala	Gly		
		35						40					45				
Met	Cys	Lys	Pro	Lys	Phe	Pro	Pro	His	Gly	Gly	Pro	Asn	Asn	Trp	Ile		
	50					55					60						
His	Pro	Xaa	Lys	Xaa	Pro	Xaa	Gln	Lys	Lys	Xaa	Lys	Thr	Phe	Phe	Phe		
65					70				75						80		
Leu	Xaa	Xaa	Xaa	Pro	Gln	Lys	Asn	Gln	Lys	Lys	Lys	Phe	Lys	Lys			
				85				90						95			

<210> 2609  
 <211> 305  
 <212> DNA  
 <213> Homo sapiens

<400> 2609  
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 ttgacacgtc cctgacgata cctatccgct catctggaga cccatgcggt ccttggaccc  
 120  
 caattgccta cgaaaaaatt ttttttttcc cccccaaaaa acaccccccc ctgcattctg  
 180  
 tgaaagtctt acctcggggg cgtcatctcg gctgtcatcg tcggcaaata actcagctgg  
 240  
 ccgtaccctt cgtcatcgcc cgggccaccg acctcgacgg cncagcgtgc acggcaacga  
 300  
 ccacc  
 305

<210> 2610  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

Met	Met	Ser	Gly	Lys	Asp	Asp	Pro	Gly	Met	Ala	Lys	Val	Tyr	Gly	Phe		
1				5				10						15			
Val	Asp	Thr	Ser	Leu	Thr	Ile	Pro	Ile	Arg	Ser	Ser	Gly	Asp	Pro	Cys		
			20					25					30				
Val	Pro	Trp	Thr	Pro	Ile	Ala	Tyr	Glu	Lys	Ile	Phe	Phe	Phe	Pro	Pro		
		35					40				45						
Lys	Lys	His	Pro	Pro	Leu	Ala	Ser	Val	Lys	Val	Leu	Pro	Arg	Gly	Arg		
	50					55				60							
His	Leu	Gly	Cys	His	Arg	Arg	Gln	Ile	Thr	Gln	Leu	Ala	Val	Pro	Phe		
65					70				75						80		
Val	Ile	Ala	Arg	Ala	Thr	Asp	Leu	Asp	Gly	Xaa	Ala	Cys	Thr	Ala	Thr		
				85				90						95			

Thr Thr

<210> 2611  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2611

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gtgggggcaat ggcttcaggt ggacttcgac catccggtga ccaacgcgac catcaccctg  
120  
acgcccagcg ccaccgctgt cggagctcag gtgcgccgcg tcgaggtggc aacagccaac  
180  
ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgccctac  
240  
ggcgagacct catgggtccg gttcaccgcg accggcaccg acgacggctc ccccggcgtg  
300  
cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg  
342

&lt;210&gt; 2612

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2612

Ala	Ala	Ala	Ile	Asp	Gly	Asp	Ser	Ser	Thr	Ser	Trp	Val	Ser	Ser	Ser
1				5					10					15	
Leu	Gln	Thr	Ala	Val	Gly	Gln	Trp	Leu	Gln	Val	Asp	Phe	Asp	His	Pro
			20					25					30		
Val	Thr	Asn	Ala	Thr	Ile	Thr	Leu	Thr	Pro	Ser	Ala	Thr	Ala	Val	Gly
		35					40					45			
Ala	Gln	Val	Arg	Arg	Val	Glu	Val	Ala	Thr	Ala	Asn	Gly	Thr	Ser	Thr
	50					55					60				
Ile	Arg	Phe	Asp	Gln	Pro	Gly	Lys	Pro	Leu	Thr	Ala	Ala	Leu	Pro	Tyr
65				70					75					80	
Gly	Glu	Thr	Ser	Trp	Val	Arg	Phe	Thr	Ala	Thr	Gly	Thr	Asp	Asp	Gly
			85						90				95		
Ser	Pro	Gly	Val	Gln	Phe	Gly	Ile	Thr	Asp	Phe	Ser	Val	Thr	Gln	Tyr
		100						105					110		
Asp	Ala														

&lt;210&gt; 2613

&lt;211&gt; 414

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2613

acgcgtgtgg gttgtgcaca gggcatggct gctctggaca ggcctgggcc ctgggcatca  
60  
ttctcctcct ccaaaagggtg agggctctgac ctaatggtac tttgtctgat gttttccaga  
120  
tatgccocta ctgggaaggg ccaagtgggc aggcagagtc tggggtggag cgaggtgggg  
180  
ctgggaagca ctctgcttt tctgctgcc cagaacgaat gcaagttctg gcagcttctc  
240  
ctctcctcgg gaggaggaaa ggagggtctg cctccaggtc tcaggctgag ggagtgggct  
300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact  
 360  
 ctggggcccc tcccaggctc tcctcgtggc aggcaggac ttggggccagc atgg  
 414

<210> 2614  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 2614  
 Met Val Leu Cys Leu Met Phe Ser Arg Tyr Ala Pro Thr Gly Lys Gly  
 1 5 10 15  
 Gln Val Gly Arg Gln Ser Leu Gly Trp Ser Glu Val Gly Leu Gly Ser  
 20 25 30  
 Thr Pro Ala Phe Leu Leu Pro Gln Asn Glu Cys Lys Phe Trp Gln Leu  
 35 40 45  
 Leu Leu Leu Leu Gly Gly Gly Lys Glu Gly Ser Pro Pro Gly Leu Arg  
 50 55 60  
 Leu Arg Glu Trp Ala Gly Asp Pro Leu Asp Gly Gln Gln Arg Leu Ala  
 65 70 75 80  
 Ser Val Arg Arg Leu Pro Cys Val Thr Leu Gly Pro Leu Pro Gly Ser  
 85 90 95  
 Pro Arg Gly Arg Gln Gly Leu Gly Pro Ala Trp  
 100 105

<210> 2615  
 <211> 394  
 <212> DNA  
 <213> Homo sapiens

<400> 2615  
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 gacgtcgacg ccattgctgaa ggaaacgctg gccagttcg gccacatcga taccctcgtc  
 120  
 aacaatgcgg gcgtcacgca tgcggccgat ttcctcgacg tgtgcgaaga cgatttcgac  
 180  
 cgggtcatgc gcattaacct gaaatcgatg ttcctgtgcg gccaggccgc ggcgcgcgag  
 240  
 atggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc  
 300  
 attccgaacc aggtgccgta cgtggtgtcg aaaggcgcca tcaaccagct gaccaaggtc  
 360  
 atggccttga acctggcgcc gcacggtgcg cgct  
 394

<210> 2616  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 2616  
 Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val

```

      1           5           10           15
Ser Gln Lys Ala Asp Val Asp Ala Met Leu Lys Glu Thr Leu Ala Gln
      20           25           30
Phe Gly His Ile Asp Ile Leu Val Asn Asn Ala Gly Val Thr His Ala
      35           40           45
Ala Asp Phe Leu Asp Val Cys Glu Asp Asp Phe Asp Arg Val Met Arg
      50           55           60
Ile Asn Leu Lys Ser Met Phe Leu Cys Gly Gln Ala Ala Ala Arg Glu
      65           70           75           80
Met Val Lys Arg Asn Ser Gly Cys Ile Ile Asn Met Ser Ser Val Asn
      85           90           95
Ala Glu Leu Ala Ile Pro Asn Gln Val Pro Tyr Val Val Ser Lys Gly
      100          105          110
Ala Ile Asn Gln Leu Thr Lys Val Met Ala Leu Asn Leu Ala Pro His
      115          120          125
Gly Ala Arg
      130

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<210> 2617  
 <211> 513  
 <212> DNA  
 <213> Homo sapiens

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<400> 2617
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agacattgtg agatgggaaa tatcatggaa acacctatac tttccggctc ccacttgaac
120
gtcaccttgg gaaatcacia gattctcaat gacgtctccg tatcattcca agcgggagtt
180
atgcacgcca tacttggccc caacggttct gggaagacca ccttggtacg cacgttatgc
240
ggagccctct ccccgagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg
300
tcgcacccct gtatcgcgcg tcgtattgcg atcgtctggc agagcgcgac cgctccctct
360
gacctcacgg tacgtcacct cgttggctac gggagatatg cccacacacc gtggtggcag
420
ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg
480
tgcttcgccc atcgacgcgt caccactctc tca
513

```

<210> 2618  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2618
Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe
      1           5           10           15
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro
      20           25           30
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile

```

```

          35          40          45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
    50          55          60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
65          70          75          80
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
          85          90          95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
    100          105          110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
    115          120          125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
    130          135          140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
145          150          155          160
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
          165          170

```

<210> 2619  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2619
nnaaatctcg acgacctga ggttttcctc aagctgttgc cgcgttcggc anccggggaa
60
cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttccttga taacggctcg accgacgtgc ttgccgacac ccttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggg ttacgagcgg
240
gcgggcgggc acccttacgg ctcggtgtac cccggggccga ttggtgcggg gctcaatccg
300
cagctgcggg gcgtggagca tcccgtcgat cgtggtctgc catacgcg
348

```

<210> 2620  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

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<400> 2620
Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser
  1          5          10          15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
    20          25          30
Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn
    35          40          45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
    50          55          60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
65          70          75          80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

```

	85		90		95										
Val	Leu	Asn	Pro	Gln	Leu	Arg	Gly	Val	Glu	His	Pro	Val	Asp	Arg	Gly
		100					105						110		
Leu	Pro	Tyr	Ala												
		115													

<210> 2621  
 <211> 1485  
 <212> DNA  
 <213> Homo sapiens

<400> 2621  
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 60  
 ttacttttaa aaattacttg ttccccaaa ttgttgagtg ccgccgtttg gtttcctatg  
 120  
 ttttctttcc ctgttttgat tttgctgaag ggagaggtgg tggtaggttag gatcagagct  
 180  
 ctcttggcat ccgtggggag gatttgctgg tggtaggttc gggctcatgc ccagacacac  
 240  
 tcaactgccc gtctgtccaa ggctccccct tcccccttgc tggtagggagg agctcgtgtg  
 300  
 ctcttggcc gcttactgga agggcgtttt tcagagctgc agggacaggg tgagcagctg  
 360  
 aagggctagg agggaagccg gcccccgctc tgcagaagct gcatttcagc tgaatctgtg  
 420  
 tttcagcctc agttgggtgc accgttagcc cctctcctcc cggatggtea tgtttttgtc  
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 540  
 atatgaaaag gccagaagga ggagcaaggg ctgttttctg gagtgggtga ggtgttgtcc  
 600  
 tgcagttgtc attgtcttct ccaccgggct gtteccattt atttcctgtg gaactgaatc  
 660  
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 720  
 gaagccaacc accttggaga ttttttttct tgaatttcgc tgttttcttc tgcttccttt  
 780  
 agataaaaag cagctcaaga gaccttatct tagggatgag aaaaacatgc atattaattc  
 840  
 catctgagtg attgtcagtg taaggccttt taaaacaaaa gcaagttctt tgtttaggaat  
 900  
 tgggtcaaat tcattctctt cttaagccc atcaactccc aggacggttt gagttactca  
 960  
 gttacctaag ctgtctattc atccaaatca ttttctagag tcaactgtata agggctctatg  
 1020  
 agtagctgtg tatgaataaa tattacctgt ctacctcaaa atacacatac tgctgaagca  
 1080  
 ttctgtacaa ccgtgtgtta tcacagtgc gttttaagtg taacngttga acttaggcat  
 1140  
 tttcctgtgt ggcggaataa gaaaggatnt aacagttaca agcctccaaa ttcagataaa  
 1200  
 attaaatcac agttcagatg aaactgaata tcattgtaat aatctcataa tatatatttg  
 1260

taacttgnta gctatctttg aaatcactgn actttgcaat ggtgctaagc tgatagattt  
 1320  
 aaatacacag acgggcgagt ggcgcccgtg tcgatgtctt cagccagtgg tgaccctgct  
 1380  
 tttgtaaccg cgttaacctg acaaaacctc agcagcagaa gtccctattt ttctaggagt  
 1440  
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 1485

<210> 2622  
 <211> 83  
 <212> PRT  
 <213> Homo sapiens

<400> 2622  
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 1 5 10 15  
 Val Arg Ile Arg Ala Leu Leu Ala Ser Val Gly Arg Ile Cys Trp Trp  
 20 25 30  
 Trp Leu Arg Ala His Ala Gln Thr His Ser Leu Pro Arg Leu Ser Lys  
 35 40 45  
 Ala Ser Pro Ser Pro Leu Leu Val Gly Gly Ala Arg Val Leu Leu Gly  
 50 55 60  
 Arg Leu Leu Glu Gly Arg Phe Ser Glu Leu Gln Gly Gln Gly Glu Gln  
 65 70 75 80  
 Leu Lys Gly

<210> 2623  
 <211> 3524  
 <212> DNA  
 <213> Homo sapiens

<400> 2623  
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 gcgacggcgg ctgcggcggc ggcgggaccc ccaggcctcc tccgggggtat gaaaatcggc  
 120  
 agtgggttcc tgagtggcgg cggaggtacc ggcagtagcg gtggtagcgg ctccggcggc  
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 ggtggtagtg gcggcggcgg cggcggcggc agcagcggca ggagggcaga gatggaaccc  
 240  
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 300  
 cggcggcggc ggtcggcggc cctcccccg caatgcgtgt taccctcctc tacctccgca  
 360  
 gccccggcgg ctgagccccc cctccgcca gccccggaca tgactttcaa gaaggagccg  
 420  
 gcggcgctcag ccgcggcctt cccctcgcag aggacctcct ggggggttctt gcagtctttg  
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 540  
 caccaccacc actatggggg gctgttcgct ggagctgaag agaggtctcc aggcctagga  
 600



ggcgggtgaag ggggggagtca cggcgtcatc caggacctca gtattctcca ccagcatgtc  
660  
cagcagcaac cagcccagca ccaccgtgac gtattactca gcagcagtag caggactgat  
720  
gaccaccatg gcaactgagga gccaaagcag gacactaatg tcaaaaaggc aaaaaggcca  
780  
aagccagaat ctcaagggaat caaagccaag aggaagccaa gtgcatcttc caaaccttct  
840  
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ggagaaagac ctttccagtg cagccagtgt agtatgggtt tcattcagaa atacctacta  
1020  
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1140  
tataagtgtg acacttgcca acagtatttt tcaaggactg atagattgtt gaagcacagg  
1200  
cgcacatgtg gtgaagtcac agttaaagga gccactagtg cagaacctgg gtcacaaac  
1260  
cataccaata tgggtaatct ggctgtgttg tctcagggaa atacaagttc ttcaaggaga  
1320  
aaaacaaagt caaaaagcat agctattgaa aataaggaac agaagaccgg taaaacaaat  
1380  
gaatcgcaaa tttcaaataa tataaacatg cagagttact cagtagaaat gcctaccgtg  
1440  
tcttccagtg gaggcataat tggcactgga atagatgaac tgcagaagag ggtgccaaaa  
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1560  
ccattaccag acatagtagg acagaaatcc ttgtctggaa aaccaagtgg ctcaactggc  
1620  
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1680  
ggtcagataa gtagtaatta tgatgatgcc atgcagtttt caaagaaaag aagatattta  
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tctgtcattc agtctgcagg tgtcagtgtt ttggacaatg aggcaccatt gtcacttatt  
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1920  
gaggttttac aaagtatttt ggatcaatac tccaacaaat cagaaagcca gaaagaggat  
1980  
cctttcaata ttgcagaacc acgagtggat ttacacacct caggagaaca ctcagaattg  
2040  
gttcaagaag aaaatttgag ccagggcacc caaacacctt caaatgataa agcaagtatg  
2100  
ttgcaagaat actccaaata cctccaacag gcttttgaaa aatccactaa tgcaagtttt  
2160  
actcttggac acggtttcca atttgtcagt ttgtcttcac ctctccacaa ccacactttg  
2220

tttccagaaa aacaaatata cactacgtct cctttggagt gtggtttcgg ccaatctgtt  
 2280  
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 2340  
 ccaggtcttt atttgtctgc tttggatgct acacatcagc agttgacacc ttcccaggag  
 2400  
 ctggatgatc tgatagattc tcagaagaac ttagagactt catcagcctt ccagtcctca  
 2460  
 tctcagaaat tgactagcca gaaggaacag aaaaacttag agtcttcaac aggctttcag  
 2520  
 attccatctc aggagttagc tagccagata gatcctcaga aagacataga gcctagaaca  
 2580  
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 2640  
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&lt;210&gt; 2624

&lt;211&gt; 895

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2624

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1867

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Gly Lys Pro Ser Gly Ser Leu Gly Ile Val Ser Asn Asn Ser Val Glu		495
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Thr Ile Gly Leu Leu Gln Ser Thr Ser Gly Lys Gln Gly Gln Ile Ser		510
	515	520
Ser Asn Tyr Asp Asp Ala Met Gln Phe Ser Lys Lys Arg Arg Tyr Leu		525
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Pro Thr Ala Ser Ser Asn Ser Ala Phe Ser Ile Asn Val Gly His Met		540
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Val Ser Gln Gln Ser Val Ile Gln Ser Ala Gly Val Ser Val Leu Asp		560
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Gly Gln Ser Val Thr Ser Val Leu Pro Ser Ser Leu Pro Lys Pro Pro		720
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Phe Gly Met Leu Phe Gly Ser Gln Pro Gly Leu Tyr Leu Ser Ala Leu		735
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Asp Ala Thr His Gln Gln Leu Thr Pro Ser Gln Glu Leu Asp Asp Leu		750
	755	760
Ile Asp Ser Gln Lys Asn Leu Glu Thr Ser Ser Ala Phe Gln Ser Ser		765
	770	775
Ser Gln Lys Leu Thr Ser Gln Lys Glu Gln Lys Asn Leu Glu Ser Ser		780
785	790	795
Thr Gly Phe Gln Ile Pro Ser Gln Glu Leu Ala Ser Gln Ile Asp Pro		800
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Gln Lys Asp Ile Glu Pro Arg Thr Thr Tyr Gln Ile Glu Asn Phe Ala		815
	820	825
Gln Ala Phe Gly Ser Gln Phe Lys Ser Gly Ser Arg Val Pro Met Thr		830
	835	840
Phe Ile Thr Asn Ser Asn Gly Glu Val Asp His Arg Val Arg Thr Ser		845
	850	855
Val Ser Asp Phe Ser Gly Tyr Thr Asn Met Met Ser Asp Val Ser Glu		860
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Ala Pro Phe Ser Ser Thr Ser Phe Ser Val Pro Lys Lys Ala Arg Ala
      35           40           45
Asp Cys Thr Cys Ile Ser Thr Ala Glu Leu Phe Ile Cys Asp Ser Ala
      50           55           60
Phe Phe Arg Ser Ser Gly Ser Arg Glu Arg His Ser Phe Lys Val Phe
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Phe Leu Cys Ile Pro Pro Pro Leu His Ala
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&lt;210&gt; 2629

&lt;211&gt; 650

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2629

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&lt;210&gt; 2630

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2630

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Phe Ser Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
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 <212> PRT  
 <213> Homo sapiens

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&lt;210&gt; 2634

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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<212> DNA  
<213> Homo sapiens

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900  
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<210> 2636

<211> 63  
 <212> PRT  
 <213> Homo sapiens

<400> 2636  
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 <213> Homo sapiens

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Phe His Pro Leu Glu Trp Leu Ala Arg Glu Ala Cys Asn Gln Asp Ala  
35 40 45  
Leu Gln Glu Ala Gly Thr Phe Arg His Thr Leu Trp Lys Arg Val Gln  
50 55 60  
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65 70 75 80  
Asp Gly Asn Leu Glu Leu Leu Thr Arg Pro Asp Thr Pro Pro Trp Ala  
85 90 95  
Arg Asp Leu Trp Met Phe Ile Phe Ser Asp Thr Met Leu Leu Asn Ile  
100 105 110  
Pro Leu Val Met Asn Asn Glu Arg His Lys Gly Glu Met Ala Tyr Ile  
115 120 125  
Val Val Gln Asn His Met Asn Leu Ser Glu Asn Ala Ser Asn Asn Val  
130 135 140  
Pro Phe Ser Trp Lys Ile Lys Asp Tyr Leu Glu Glu Leu Trp Val Gln  
145 150 155 160  
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165 170 175  
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180 185 190  
Glu Pro Gln Gln Glu Leu Leu Gln Cys Tyr Leu Lys Asp Phe Ile Leu  
195 200 205  
Leu Thr Met Arg Val Ser Thr Glu Glu Glu Leu Lys Phe Leu Gln Met  
210 215 220  
Ala Leu Trp Ser Cys Thr Arg Lys Leu Lys Ala Ala Ser Glu Ala Pro  
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<210> 2639  
<211> 3777  
<212> DNA  
<213> Homo sapiens

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120



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<210> 2640

<211> 645

<212> PRT

<213> Homo sapiens

<400> 2640

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Gln	Tyr	Thr	Asp	Arg	Leu	Glu	Leu	Gln	Pro	Gly	Ala	Ala	Ser	Gln	Phe
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Ile	Ala	Ala	Thr	Pro	Thr	Ser	Leu	Met	Glu	Ala	Gln	Ala	Glu	Gly	Pro
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Pro	Asp	His	Asn	Arg	Leu	Val	Val	Arg	Glu	Phe	Glu	Asn	Leu	Pro	Gly
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225				230						235				240	
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			245					250						255	
Ser	Arg	Asp	Ile	Asp	Pro	His	Val	Glu	Gly	Gln	Ile	Gly	Gln	Val	Ala

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 275 280 285  
 Asp Leu Pro Gly His Gln Gly Asp Leu Ser Thr Phe Leu His Gln Glu  
 290 295 300  
 Gly Lys Arg Glu Lys Ile Thr Pro Arg Asn Gly Glu Leu Phe His Cys  
 305 310 315 320  
 Val Ser Glu Asn Glu His Gly Ala Pro Thr Arg Lys Asp Met Val Arg  
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 Ser Ser Phe Val Thr Arg His Ser Arg Ile Pro Val Leu Ala Gln Glu  
 340 345 350  
 Ile Asp Ser Thr Leu Glu Ser Ser Ser Pro Val Ser Ala Lys Glu Lys  
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 370 375 380  
 Glu Lys Arg Gln Phe Lys Ser Phe Leu Gly Asp Leu Ser Ser Ala Ser  
 385 390 395 400  
 Asp Lys Leu Leu Glu Glu Lys Leu Ala Thr Val Pro Ala Pro Phe Cys  
 405 410 415  
 Glu Glu Glu Val Leu Thr Pro Phe Ser Arg Leu Thr Val Asp Ser His  
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 Gly Lys Pro Pro Thr Arg Pro Gly Val Glu Ala Arg Leu Arg Arg Tyr  
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 Lys Val Leu Gly Ser Ser Asn Ser Asp Ser Asp Leu Phe Ser Arg Leu  
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 Ala Gln Ile Leu Gln Asn Gly Ser Gln Lys Pro Arg Ser Thr Thr Gln  
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 Cys Lys Ser Pro Gly Ser Pro His Asn Pro Lys Thr Pro Pro Lys Ser  
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 Pro Val Val Pro Arg Arg Ser Pro Ser Ala Ser Pro Arg Ser Ser Ser  
 545 550 555 560  
 Leu Pro Arg Thr Ser Ser Ser Ser Pro Ser Arg Ala Gly Arg Pro His  
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 His Asp Gln Arg Ser Ser Ser Pro His Leu Gly Arg Ser Lys Ser Pro  
 580 585 590  
 Pro Ser His Ser Gly Ser Ser Ser Ser Arg Arg Ser Cys Gln Gln Glu  
 595 600 605  
 His Cys Lys Pro Ser Lys Asn Gly Leu Lys Gly Ser Gly Ser Leu His  
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&lt;210&gt; 2641

&lt;211&gt; 744

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<210> 2642  
<211> 176  
<212> PRT  
<213> Homo sapiens

<400> 2642  
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Val Thr Val Arg Ile His Gly Ser Met Leu Arg Ala His Arg Cys Val  
35 40 45  
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50 55 60  
Ser Asp Ile Glu Ile Pro Ser Val Val Ser Val Gln Ser Val Gln Lys  
65 70 75 80  
Leu Ile Asp Phe Met Tyr Ser Gly Val Leu Arg Val Ser Gln Ser Glu  
85 90 95  
Ala Leu Gln Ile Leu Thr Ala Ala Ser Ile Leu Gln Ile Lys Thr Val  
100 105 110  
Ile Asp Glu Cys Thr Arg Ile Val Ser Gln Asn Val Gly Asp Val Phe  
115 120 125  
Pro Gly Ile Gln Asp Ser Gly Gln Asp Thr Pro Arg Gly Thr Pro Glu  
130 135 140  
Ser Gly Thr Ser Gly Gln Ser Ser Asp Thr Glu Ser Gly Tyr Leu Gln

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<212> DNA  
<213> Homo sapiens

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Arg Pro Asn Leu Thr Ser His Pro Asp Gly Ser Glu Asp Leu Glu Pro  
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&lt;400&gt; 2649

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&lt;210&gt; 2650

&lt;211&gt; 428

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2650

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Leu	Leu	Phe	Leu	Ala	Phe	Leu	Leu	Leu	Ser	Ser	Arg	Thr	Ala	Arg	Ser
			20					25					30		
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
		35					40					45			
Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
		50				55					60				
Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
65					70				75					80	
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			85					90						95	
Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
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Ala	Lys	Gly	Thr	Thr	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp

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Cys Gln Ile Val Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu		160
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Asp Asn Cys Gly Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val		175
	180	185
Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr		190
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Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys		205
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Gly Pro Asp His Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys		220
	225	230
Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser		235
	245	250
Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala		255
	260	265
Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser		270
	275	280
Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg		285
	290	295
Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly		300
	305	310
Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val		315
	325	330
Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys		335
	340	345
Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly		350
	355	360
Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp		365
	370	375
Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile		380
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Gln Ser Pro Gly Ser Phe Leu Cys Gly Gly Gly His Pro Gly Ala Cys		395
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His Phe Ser Gly Arg Val Glu Met His Val His Pro		415
	420	425

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 <211> 628  
 <212> DNA  
 <213> Homo sapiens

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628

&lt;210&gt; 2652

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2652

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Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
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Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
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Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
65					70					75				80	
Gly	Asp	Ile	Ile	Arg	Leu	Thr	Lys	Gly	Tyr	Ala	Ser	Val	Phe	Lys	Gly
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Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
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Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
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Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
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Ser	Asn	Pro	Ser	Ala	Ser	Gln	Pro	Thr	Thr	Gly	Pro	Ser	Ala	Ala	Ser
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Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
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Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
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Ala	Pro	Glu	Ser	Leu	Glu	Ala	Ser	Pro	Thr	Thr	His	Leu	Gln	Ala	Arg
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Leu															

&lt;210&gt; 2653

&lt;211&gt; 2103

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2653

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120  
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 1980  
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 2103

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 <211> 70  
 <212> PRT  
 <213> Homo sapiens

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 Ser Asp Ser Lys Cys Leu Leu Leu Gly Ala Val Ala His Ala Cys  
 35 40 45  
 Asn Pro Ser Thr Leu Gly Gly Arg Gly Gly Arg Ile Thr Arg Ser Gly  
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 Asp Arg Asp Tyr Pro Gly  
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<210> 2655  
 <211> 1752  
 <212> DNA  
 <213> Homo sapiens

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1752

&lt;210&gt; 2656

&lt;211&gt; 493

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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 Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met  
 35 40 45  
 Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg  
 50 55 60  
 Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val  
 65 70 75 80  
 Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys  
 85 90 95  
 Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu  
 100 105 110  
 Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln  
 115 120 125  
 Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His  
 130 135 140  
 Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg  
 145 150 155 160  
 Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe  
 165 170 175  
 Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe  
 180 185 190  
 Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro  
 195 200 205  
 Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn  
 210 215 220  
 Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys  
 225 230 235 240  
 Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile  
 245 250 255  
 Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr  
 260 265 270  
 Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys  
 275 280 285  
 Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe  
 290 295 300  
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 305 310 315 320  
 Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys  
 325 330 335  
 Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser  
 340 345 350  
 Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu  
 355 360 365  
 Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg  
 370 375 380  
 Ala Lys Lys Lys Lys Lys Lys Lys Lys Lys Leu Lys Asp Val Leu Asn  
 385 390 395 400  
 Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys  
 405 410 415  
 Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

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	435		440		445										
Ala	Ile	Thr	Lys	Lys	Arg	Lys	Thr	Val	Ile	Lys	Ser	Pro	Thr	Val	Pro
	450		455		460										
Glu	Phe	Gln	Leu	Ile	Cys	Thr	Asn	Leu	Asp	Glu	Leu	Arg	Glu	Leu	Ile
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	485		490												

&lt;210&gt; 2657

&lt;211&gt; 972

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2657

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&lt;210&gt; 2658

&lt;211&gt; 76

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2658

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20 25 30  
Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala  
35 40 45  
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly  
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Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp  
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<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

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Pro	Ala	Pro	Tyr	Val	Pro	Pro	Leu	Pro	Asn	Val	Arg	Val	Asn	Tyr	Asp		
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Phe	Gly	Pro	Ile	His	Met	Pro	Leu	Glu	His	Asn	Leu	Pro	Met	His	Phe		
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 <212> DNA  
 <213> Homo sapiens

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<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

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			20					25					30		
Lys	Leu	Glu	Met	Lys	Ala	Leu	Arg	Glu	Leu	Asp	Arg	Phe	Ser	Val	Leu
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Asn	Ser	Gln	His	Met	Phe	Glu	Val	Leu	Ala	Ala	Met	Asn	His	Arg	Ser
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Leu	Ile	Leu	Leu	Asp	Glu	Cys	Ser	Lys	Val	Val	Leu	Asp	Asn	Ile	His
65				70					75					80	
Gly	Cys	Pro	Leu	Arg	Ile	Met	Ile	Asn	Ile	Leu	Gln	Ser	Cys	Lys	Asp
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145				150					155					160	
Ile	Leu	Ser	Ile	Leu	His	Thr	Tyr	Ser	Ser	Leu	Asn	His	Val	Tyr	Lys
				165				170						175	
Cys	Gln	Asn	Lys	Glu	Gln	Phe	Val	Glu	Val	Met	Ala	Ser	Ala	Leu	Thr
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Ser	Phe	Cys	Leu	Met	Asn	Tyr	Phe	Pro	Leu	Ala	Pro	Phe	Asn	Gln	Leu
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Leu	Gln	Lys	Asp	Ile	Ile	Ser	Glu	Leu	Leu	Thr	Ser	Asp	Asp	Met	Lys
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Asn	Ala	Tyr	Lys	Leu	His	Thr	Leu	Asp	Thr	Cys	Leu	Lys	Leu	Asp	Asp
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720
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840

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<212> PRT  
<213> Homo sapiens

<400> 2664  
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Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser  
35 40 45  
Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn  
50 55 60  
Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg  
65 70 75 80  
Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu  
85 90 95  
Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly  
100 105 110  
Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala  
115 120 125  
Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp  
130 135 140  
Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro  
145 150 155 160  
Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala  
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<210> 2665  
<211> 720  
<212> DNA  
<213> Homo sapiens

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180

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 720

&lt;210&gt; 2666

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2666

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			20					25					30		
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
		35					40					45			
Gln	Val	Leu	Arg	Arg	Thr	Pro	Arg	Thr	Lys	Met	Phe	Thr	Pro	Pro	Ser
		50				55					60				
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
65					70				75					80	
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
			85					90						95	
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
			100					105					110		
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
		115					120					125			
Glu	Leu	Glu	Leu	Glu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp
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Lys	Leu	Gly	Leu	Thr	Val	Cys	Tyr	Arg							
145						150									

&lt;210&gt; 2667

&lt;211&gt; 289

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2667

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<210> 2668

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2668

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			20					25					30		
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		35					40					45			
Thr	Arg	His	Phe	Lys	Glu	Ser	Ile	Lys	Phe	Ile	His	Glu	Cys	Arg	Leu
	50					55					60				
Arg	Gly	Glu	Ser	Cys	Leu	Val	His	Cys	Leu	Ala	Gly	Val	Ser	Arg	Ser
65					70				75					80	
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<210> 2669

<211> 4285

<212> DNA

<213> Homo sapiens

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&lt;210&gt; 2670

&lt;211&gt; 979

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2670

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Cys	Met	Glu	Lys	Leu	Arg	Asp	Ala	Arg	Leu	Cys	Pro	His	Cys	Ser	Lys	45
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Cys	Arg	Trp	Ala	Glu	Glu	Val	Thr	Gln	Gln	Leu	Asp	Thr	Leu	Gln	Leu	95
			85					90								
Cys	Ser	Leu	Thr	Lys	His	Glu	Glu	Asn	Glu	Lys	Asp	Lys	Cys	Glu	Asn	110
			100					105								
His	His	Glu	Lys	Leu	Ser	Val	Phe	Cys	Trp	Thr	Cys	Lys	Lys	Cys	Ile	125
			115				120									
Cys	His	Gln	Cys	Ala	Leu	Trp	Gly	Gly	Met	His	Gly	Gly	His	Thr	Phe	140
			130			135										
Lys	Pro	Leu	Ala	Glu	Ile	Tyr	Glu	Gln	His	Val	Thr	Lys	Val	Asn	Glu	160
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Glu	Val	Ala	Lys	Leu	Arg	Arg	Arg	Leu	Met	Glu	Leu	Ile	Ser	Leu	Val	175
			165					170								
Gln	Glu	Val	Glu	Arg	Asn	Val	Glu	Ala	Val	Arg	Asn	Ala	Lys	Asp	Glu	190
			180				185									
Arg	Val	Arg	Glu	Ile	Arg	Asn	Ala	Val	Glu	Met	Met	Ile	Ala	Arg	Leu	205
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Asp	Thr	Gln	Leu	Lys	Asn	Lys	Leu	Ile	Thr	Leu	Met	Gly	Gln	Lys	Thr	220
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Ser	Leu	Thr	Gln	Glu	Thr	Glu	Leu	Leu	Glu	Ser	Leu	Leu	Gln	Glu	Val	240
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Glu	His	Gln	Leu	Arg	Ser	Cys	Ser	Lys	Ser	Glu	Leu	Ile	Ser	Lys	Ser	



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Ser Glu Ile	Leu Met Met Phe Gln Gln Val His Arg Lys Pro Met Ala				
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Ser Phe Val Thr Thr Pro Val Pro Pro Asp Phe Thr Ser Glu Leu Val					
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Pro Ser Tyr Asp Ser Ala Thr Phe Val Leu Glu Asn Phe Ser Thr Leu					
	290		295		300
Arg Gln Arg Ala Asp Pro Val Tyr Ser Pro Pro Leu Gln Val Ser Gly					
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Leu Cys Trp Arg Leu Lys Val Tyr Pro Asp Gly Asn Gly Val Val Arg					
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Gly Tyr Tyr Leu Ser Val Phe Leu Glu Leu Ser Ala Gly Leu Pro Glu					
	340		345		350
Thr Ser Lys Tyr Glu Tyr Arg Val Glu Met Val His Gln Ser Cys Asn					
	355		360		365
Asp Pro Thr Lys Asn Ile Ile Arg Glu Phe Ala Ser Asp Phe Glu Val					
	370		375		380
Gly Glu Cys Trp Gly Tyr Asn Arg Phe Phe Arg Leu Asp Leu Leu Ala					
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Asn Glu Gly Tyr Leu Asn Pro Gln Asn Asp Thr Val Ile Leu Arg Phe					
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Gln Val Arg Ser Pro Thr Phe Phe Gln Lys Ser Arg Asp Gln His Trp					
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Tyr Ile Thr Gln Leu Glu Ala Ala Gln Thr Ser Tyr Ile Gln Gln Ile					
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Asn Asn Leu Lys Glu Arg Leu Thr Ile Glu Leu Ser Arg Thr Gln Lys					
	450		455		460
Ser Arg Asp Leu Ser Pro Pro Asp Asn His Leu Ser Pro Gln Asn Asp					
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Asp Ala Leu Glu Thr Arg Ala Lys Lys Ser Ala Cys Ser Asp Met Leu					
	485		490		495
Leu Glu Gly Gly Pro Thr Thr Ala Ser Val Arg Glu Ala Lys Glu Asp					
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Glu Glu Asp Glu Glu Lys Ile Gln Asn Glu Asp Tyr His His Glu Leu					
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Ser Asp Gly Asp Leu Asp Leu Asp Leu Val Tyr Glu Asp Glu Val Asn					
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Gln Leu Asp Gly Ser Ser Ser Ser Ala Ser Ser Thr Ala Thr Ser Asn					
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Thr Glu Glu Asn Asp Ile Asp Glu Glu Thr Met Ser Gly Glu Asn Asp					
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Val Glu Tyr Asn Asn Met Glu Leu Glu Glu Gly Glu Leu Met Glu Asp					
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Ala Ala Ala Ala Gly Pro Ala Gly Ser Ser His Gly Tyr Val Gly Ser					
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Ser Leu Leu Asp Ile Asp Pro Leu Ile Leu Ile His Leu Leu Asp Leu					
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Lys Asp Arg Ser Ser Ile Glu Asn Leu Trp Gly Leu Gln Pro Arg Pro					
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Pro Ala Ser Leu Leu Gln Pro Thr Ala Ser Tyr Ser Arg Lys Asp Lys					
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Asp Gln Arg Lys Gln Gln Ala Met Trp Arg Val Pro Ser Asp Leu Lys					

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 Ile Gly Asp Ile Leu Pro Lys Thr Glu Asp Arg Gln Cys Lys Ala Leu  
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 Asp Ser Asp Ala Val Val Val Ala Val Phe Ser Gly Leu Pro Ala Val  
 850 855 860  
 Glu Lys Arg Arg Lys Met Val Thr Leu Gly Ala Asn Ala Lys Gly Gly  
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 His Leu Glu Gly Leu Gln Met Thr Asp Leu Glu Asn Asn Ser Glu Thr  
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 Gly Glu Leu Gln Pro Val Leu Pro Glu Gly Ala Ser Ala Ala Pro Glu  
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 Glu Gly Met Ser Ser Asp Ser Asp Ile Glu Cys Asp Thr Glu Asn Glu  
 915 920 925  
 Glu Gln Glu Glu His Thr Ser Val Gly Gly Phe His Asp Ser Phe Met  
 930 935 940  
 Val Met Thr Gln Pro Pro Asp Glu Asp Thr His Ser Ser Phe Pro Asp  
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&lt;211&gt; 814

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2671

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&lt;210&gt; 2672

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2672

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Arg	Val	Arg	Ala	Gln	His	Pro	Gly	Lys	Val	Gly	Gly	Arg	Arg	Trp	Arg
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Lys	Asp	Ser	Arg	Ala	Val	Ser	Arg	His	Gly	Arg	Gly	Asn	Cys	Gly	Ala
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Phe	Ala	Ile	Leu	Ser	Pro	Ser	Pro	Tyr	Leu	Arg	Pro	Arg	Gly	Arg	Ala
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His	His	Pro	Pro	Ser	Arg	Leu	Gly	Gly	Gly	Arg	Ala	Pro	Ser	Trp	Pro
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Pro	Pro	Ser	Arg	Pro	Leu	Asn	Ser	Pro	Gly	Asp	Cys	Gly	Tyr	Cys	His
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Arg	Leu	Ala	Ser	Thr	Ala	Ser	Ser	Arg	Ser	Thr	Gln	Met	Arg	Thr	Val
			100					105					110		
Gly	Gly	Lys	Lys	Gly	Asp	Ala	Thr	Pro	Ser	Glu	Pro	Pro	Leu	Pro	Leu
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Pro	Arg	Pro	Xaa	Pro	Lys	Trp	Pro	Pro	Pro	Ser	Arg	Pro	Pro	Pro	Pro
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Pro	Leu	Pro	Pro	Pro	Leu	Ala	Arg	Asn	Arg	Tyr	Arg	Arg	Arg	Gly	Pro
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220

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 <212> PRT  
 <213> Homo sapiens

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 Tyr His Val Ala Ser Asp Thr Glu Lys Ile Ile Arg Glu Gly Pro Thr  
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 Tyr Tyr Gln Ile Arg Ser Ser Gln Leu Asp Arg Ser Ile Lys Gly Leu  
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 Lys Glu His Phe His Lys Ser Ser Ser Ser Ser Gly Val Pro Tyr Ser  
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 Pro Ala Ile Pro Asn Lys Arg Lys Asp Thr Pro Thr Lys Lys Pro Val



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690

&lt;210&gt; 2675

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2675

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 ggacctccgc agactgaccc cctcaagcc tgtgaagaaa aagaagcacc gctttgggct  
 600  
 acccgatga cacattccca tgctgggggt gacgggaggg ccccgccagc cgctggtgtg  
 660  
 cagaggtcat cccacagcat cgttccttac cctctctctg cccttcaccc g  
 711

&lt;210&gt; 2676

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2676

Met	Leu	Leu	Ile	Tyr	Val	Gly	Val	Arg	Ala	Val	Ser	Val	Leu	Val	Glu
1				5				10					15		
Trp	Gln	Gln	Trp	Glu	Ser	Leu	Arg	Phe	Gly	Glu	Tyr	Gly	Asp	Pro	Leu
			20					25					30		
Gln	Cys	Gly	Ala	Trp	Val	Gly	Gln	Cys	Ala	Leu	Tyr	Ile	Val	Ile	Met
		35					40					45			
Ile	Phe	Glu	Lys	Ser	Val	Val	Phe	Ile	Val	Leu	Leu	Leu	Leu	Gln	Trp
	50					55				60					
Lys	Lys	Val	Ala	Leu	Leu	Asn	Pro	Ile	Glu	Asn	Pro	Asp	Leu	Lys	Leu
65				70					75				80		
Ala	Ile	Val	Met	Leu	Ile	Val	Pro	Phe	Phe	Val	Asn	Ala	Leu	Met	Phe
			85					90					95		
Trp	Val	Val	Asp	Asn	Phe	Leu	Met	Arg	Lys	Gly	Lys	Thr	Lys	Ala	Lys
			100					105					110		
Leu	Glu	Glu	Arg	Gly	Ala	Asn	Gln	Asp	Ser	Arg	Asn	Gly	Ser	Lys	Val

```

<400> 2678
Leu Ala Ala Leu Ser Ala Ala Trp Gly Arg Asp Gly Gln Val His Gly
 1              5              10              15
Pro Ala Cys Val Ser Thr Pro Pro Ser Ala Gly Ala Phe Ser Leu Leu
      20              25              30
Arg Glu Asn Phe Ser His Ala Pro Ser Pro Asp Met Ser Ala Ala Ser

```

```
<400> 2680
Met Glu Leu Ile Pro Gln Asp Ala Ser Pro His Arg Arg Ala Asp Pro
 1             5             10             15
Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser
```

```

      20      25      30
Met Leu Cys Ala Ala Ala Arg Leu Cys Pro Glu Glu Ser Gln Gly Thr
      35      40      45
Leu Val Ser Ala Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
      50      55      60
Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
      65      70      75      80
Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
      85      90      95
Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
      100      105      110
Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
      115      120      125
Arg Leu Arg Asp Ala
      130

```

&lt;210&gt; 2681

&lt;211&gt; 585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2681

```

gattctctag tagccctaatt tctacccatc tggctactaa ttcaaacttt cttccttcac
60
atctgtttgt ggacttctcc aatataacta gtatgcctgg gctcattctg cttcttctct
120
tctggaatag tttatttcat gaccatgtgc agaggggggtg atgggggcaag cctcacaagc
180
cccggaggtc tgtggctgag gtgtaccttg gctttgttgc ctggaactgc tctgactctg
240
ctcttcgctc tttcctgggc tgtgtcacta cagctctgac tcctttccac cttggagttt
300
agcttccctg ccaggaaagc taaggagtag gagttgttct tggaaacaaa tgccgagcga
360
tgtgtctgtg tcactctggcc tcgagaaggt tcttcattct ctgaatctga gagacgtgca
420
ggacaacgtt ccagatttgt tttcagtact aatggttcat ctcttttttt ctgttcatcc
480
atcttccctt tccctgtttc tgtatcctct ggtaacagct tgtggatttg atcttcagag
540
ggtttttccct cttgtaactt ttcttctctc agctttctca agctt
585

```

&lt;210&gt; 2682

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2682

```

Met Asp Glu Gln Lys Lys Arg Asp Glu Pro Leu Val Leu Lys Thr Asn
1      5      10      15
Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
20      25      30
Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys

```

```

      35          40          45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys
      50          55          60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys
65          70          75          80
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser
      85          90          95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His
      100          105          110
Met Val Met Lys
      115

```

&lt;210&gt; 2683

&lt;211&gt; 498

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2683

```

naccggttac actgactcca aaactctcct tgggtggccta ggtgaaacct catggccaac
60
atcacctgga tggccaacca cactggaagg ttggatttca tcctcatggg actcttcaga
120
cgatccaaac atccagctct acttagtgtg gtcattcttg tggttttcct gatggcggtg
180
tctgaaaatg ctgtcctgat ccttctgata cactgtgaca cctacctcca caccctcatg
240
tactttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgccc
300
aagatgctcc tggaccaggt catgggtgtg aataagatct cagcccctga gtgtgggatg
360
cagatgttcc tctatctgac actagcaggt tcggaatttt tccttctagc caccatggcc
420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtcctcat gaaccatagg
480
gtctgtcttt tcctggca
498

```

&lt;210&gt; 2684

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2684

```

Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe
  1          5          10          15
Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser
      20          25          30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val
      35          40          45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr
      50          55          60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val
65          70          75          80
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile

```

85 90 95  
 Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala  
 100 105 110  
 Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val  
 115 120 125  
 Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val  
 130 135 140  
 Cys Leu Phe Leu Ala  
 145

&lt;210&gt; 2685

&lt;211&gt; 391

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2685

ngccggctgc acacgctgcc acctgggctg cctcgaaatg tccatgtgct gaagggtcaag  
 60  
 cgcaatgagc tggctgccct ggcacgaggg ggcgtggcgg gcatgggtca gcttcgggaa  
 120  
 ctctacctca caggcaaccg actgcgaagc cgggccctgg gccccgtgc ctgggtggac  
 180  
 ctcgcccata tgcagttgct ggacatcgcc gggaatcagc tcacagagat cccggagggg  
 240  
 ctccccccat cgctggagta tctgtacctg cagaataaca agattagcgc tgttcctgcc  
 300  
 agcgcctttg actctactcc caacctcaag gggatctttc tcagggttaa caagctgggt  
 360  
 gtgggctccg tagtagaaag cgccttcgga a  
 391

&lt;210&gt; 2686

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2686

Xaa Arg Leu His Thr Leu Pro Pro Gly Leu Pro Arg Asn Val His Val  
 1 5 10 15  
 Leu Lys Val Lys Arg Asn Glu Leu Ala Ala Leu Ala Arg Gly Ala Leu  
 20 25 30  
 Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu  
 35 40 45  
 Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu  
 50 55 60  
 Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly  
 65 70 75 80  
 Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser  
 85 90 95  
 Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile  
 100 105 110  
 Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala  
 115 120 125  
 Phe Arg

130

&lt;210&gt; 2687

&lt;211&gt; 399

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2687

nagtgcaga aatgtttaat acaagagatt gaaccctacc aaaatgggag gtttagcctc  
60  
caggaatggg agtgcaataa atctctaata caagagattg agcctcacca acctccagga  
120  
tgaggaaatga caggtaagac agggactaca aaagaccaag cagacaataa aattccccct  
180  
gacagtccgc taggccttat gttaagatac cggaaagata atgaaaggac caaacacaag  
240  
aaaagacagc aaatgataaa atattgctgg tttatttgga ctaaggaacc catcctgaaa  
300  
cctttgggtct tttggccaca gttaggggtg agcggggact ggatatgcca actcctaate  
360  
cagtatgtaa aggataaaaag tccagtttct caagaggag  
399

&lt;210&gt; 2688

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2688

Met	Thr	Gly	Lys	Thr	Gly	Thr	Thr	Lys	Asp	Gln	Ala	Asp	Asn	Lys	Ile
1				5				10						15	
Pro	Pro	Asp	Ser	Pro	Leu	Gly	Leu	Met	Leu	Arg	Tyr	Arg	Lys	Asp	Asn
			20					25					30		
Glu	Arg	Thr	Lys	His	Lys	Lys	Arg	Gln	Gln	Met	Ile	Lys	Tyr	Cys	Trp
		35				40					45				
Phe	Ile	Trp	Thr	Lys	Glu	Pro	Ile	Leu	Lys	Pro	Leu	Val	Phe	Trp	Pro
	50					55				60					
Gln	Leu	Gly	Leu	Ser	Gly	Asp	Trp	Ile	Cys	Gln	Leu	Leu	Ile	Gln	Tyr
65				70				75						80	
Val	Lys	Asp	Lys	Ser	Pro	Val	Ser	Gln	Glu	Glu					
			85					90							

&lt;210&gt; 2689

&lt;211&gt; 560

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2689

gcacccattc aagttgggtt agttggcttc tgtttggtgt ttgctacacc cctgtgttgt  
60  
gccctgtttc ctcagaaaag atacaaaaat gtgggtctca ccaagttgcc caggctggtc  
120  
tcaaactcct ggcctcaaga aatcctcctg gttcagcctc acaaagctcc gagattacag  
180

ttgcatgtct gtgacaagct tggaggccga gttgcaagct aagatccaag agagccatcc  
 240  
 tgaattgcga cgcgtgtact tcaataaggg attgtaaagc agggaggaaa cctctgcagc  
 300  
 tcattctgcc actgcaaagc tgggtgtagcc atgctgggtga gaaaaatcct gttcaacctg  
 360  
 gggttggtata tcgtctttga aaaacaatga ctataaaagc tacaggaaag gtatttcagg  
 420  
 acgtttattg aaggcattgg tggagctctc tgtatgtgtt ttgctctgca gggaactcaa  
 480  
 agttggcatt cccgtcacgg atgagaatgg gaaccgcttg ggggagtcgg cgaacgctgc  
 540  
 gaaacaagcc atcacgccag  
 560

<210> 2690  
 <211> 73  
 <212> PRT  
 <213> Homo sapiens

<400> 2690  
 Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe Ala Thr  
 1 5 10 15  
 Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Arg Tyr Lys Asn Val Gly  
 20 25 30  
 Leu Thr Lys Leu Pro Arg Leu Val Ser Asn Ser Trp Pro Gln Glu Ile  
 35 40 45  
 Leu Leu Val Gln Pro His Lys Ala Pro Arg Leu Gln Leu His Val Cys  
 50 55 60  
 Asp Lys Leu Gly Gly Arg Val Ala Ser  
 65 70

<210> 2691  
 <211> 532  
 <212> DNA  
 <213> Homo sapiens

<400> 2691  
 gatctcatct gtacacactt catggatggc atgaatgagc tggcgattgc ttacatcctg  
 60  
 caggggggtgc tgaaggccct cgactacatc caccacatgg gatatgtaca caggagtgtc  
 120  
 aaagccagcc acatcctgat ctctgtggat gggaaggctt acctgtctgg tttgcgcagc  
 180  
 aacctcagca tgataagcca tgggcagcgg cagcgagtgg tccacgattt tcccaagtac  
 240  
 agtgtcaagg ttctgccgtg gctcagcccc gaggtcctcc agcagaatct ccagggttat  
 300  
 gatgccaaagt ctgacatcta cagtgtggga atcacagcct gtgaactggc caacggccat  
 360  
 gtccccttta aggatatgcc tgccacccag atgctgctag agaaactgaa cggcacagtg  
 420  
 ccctgcctgt tggataccag caccatcccc gctgaggagc tgaccatgag cccttcgcgc  
 480



tcagtggcca actctggcct gagtgacagc ctgaccacca gcacaccccg gg  
532

<210> 2692

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2692

Asp	Leu	Ile	Cys	Thr	His	Phe	Met	Asp	Gly	Met	Asn	Glu	Leu	Ala	Ile
1				5					10					15	
Ala	Tyr	Ile	Leu	Gln	Gly	Val	Leu	Lys	Ala	Leu	Asp	Tyr	Ile	His	His
			20					25					30		
Met	Gly	Tyr	Val	His	Arg	Ser	Val	Lys	Ala	Ser	His	Ile	Leu	Ile	Ser
		35					40					45			
Val	Asp	Gly	Lys	Val	Tyr	Leu	Ser	Gly	Leu	Arg	Ser	Asn	Leu	Ser	Met
	50					55				60					
Ile	Ser	His	Gly	Gln	Arg	Gln	Arg	Val	Val	His	Asp	Phe	Pro	Lys	Tyr
65					70					75				80	
Ser	Val	Lys	Val	Leu	Pro	Trp	Leu	Ser	Pro	Glu	Val	Leu	Gln	Gln	Asn
				85					90					95	
Leu	Gln	Gly	Tyr	Asp	Ala	Lys	Ser	Asp	Ile	Tyr	Ser	Val	Gly	Ile	Thr
			100					105					110		
Ala	Cys	Glu	Leu	Ala	Asn	Gly	His	Val	Pro	Phe	Lys	Asp	Met	Pro	Ala
		115					120					125			
Thr	Gln	Met	Leu	Leu	Glu	Lys	Leu	Asn	Gly	Thr	Val	Pro	Cys	Leu	Leu
		130					135				140				
Asp	Thr	Ser	Thr	Ile	Pro	Ala	Glu	Glu	Leu	Thr	Met	Ser	Pro	Ser	Arg
145					150					155				160	
Ser	Val	Ala	Asn	Ser	Gly	Leu	Ser	Asp	Ser	Leu	Thr	Thr	Ser	Thr	Pro
				165					170					175	

Arg

<210> 2693

<211> 798

<212> DNA

<213> Homo sapiens

<400> 2693

gcgttcacaga atctcaccag ccttggtggtg ctgcatttgc ataacaaccg catccagcat  
60  
ctggggaccc acagcttcga ggggctgcac aatctggaga cactagacct gaattataac  
120  
aagctgcagg agttccctgt ggccatccgg accctgggca gactgcagga actgggggttc  
180  
cataacaaca acatcaaggc catcccagaa aaggccttca tggggaaccc tctgctacag  
240  
acgatacact tttatgataa cccaatccag tttgtgggaa gatcggcatt ccagtacctg  
300  
cctaaactcc acacactatc tctgaatggt gccatggaca tccaggagtt tccagatctc  
360  
aaaggcacca ccagcctgga gatcctgacc ctgacccgcg caggcatccg gctgctccca  
420

tcggggatgt gccaacagct gccaggctc cgagtcctgg aactgtctca caatcaaatt  
 480  
 gaggagctgc ccagcctgca caggtgtcag aaattggagg aaatcggcct ccaacacaac  
 540  
 cgcattctggg aaattggagc tgacaccttc agccagctga gctccctgca agccctggat  
 600  
 ttaaggtgga acgccatccg gtccatccac cccgaggcct tctccaccct gcactccctg  
 660  
 gtcaagctgg acctgacaga caaccagctg accacactgc ccctggctgg acttgggggc  
 720  
 ttgatgcatt tgaagctcaa agggaaacctt gctctctccc aggccttctc caaggacagt  
 780  
 ttcccaaaac tgaggatc  
 798

<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

Ala	Phe	Gln	Asn	Leu	Thr	Ser	Leu	Val	Val	Leu	His	Leu	His	Asn	Asn
1			5					10						15	
Arg	Ile	Gln	His	Leu	Gly	Thr	His	Ser	Phe	Glu	Gly	Leu	His	Asn	Leu
		20					25						30		
Glu	Thr	Leu	Asp	Leu	Asn	Tyr	Asn	Lys	Leu	Gln	Glu	Phe	Pro	Val	Ala
	35					40					45				
Ile	Arg	Thr	Leu	Gly	Arg	Leu	Gln	Glu	Leu	Gly	Phe	His	Asn	Asn	Asn
	50				55					60					
Ile	Lys	Ala	Ile	Pro	Glu	Lys	Ala	Phe	Met	Gly	Asn	Pro	Leu	Leu	Gln
65			70					75						80	
Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala
		85						90					95		
Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met
	100							105					110		
Asp	Ile	Gln	Glu	Phe	Pro	Asp	Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	Ile
	115						120					125			
Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys
	130					135					140				
Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile
145				150					155					160	
Glu	Glu	Leu	Pro	Ser	Leu	His	Arg	Cys	Gln	Lys	Leu	Glu	Glu	Ile	Gly
		165						170						175	
Leu	Gln	His	Asn	Arg	Ile	Trp	Glu	Ile	Gly	Ala	Asp	Thr	Phe	Ser	Gln
	180						185						190		
Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser
	195						200					205			
Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp
	210					215					220				
Leu	Thr	Asp	Asn	Gln	Leu	Thr	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly
225				230					235					240	
Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe
		245						250						255	
Ser	Lys	Asp	Ser	Phe	Pro	Lys	Leu	Arg	Ile						

260

265

&lt;210&gt; 2695

&lt;211&gt; 2265

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2695

nagccagagg gacgagctag cccgacgatg gcccagggga cattgatccg tgtgacccca  
60  
gagcagccca cccatgccgt gtgtgtgctg ggcaccttga ctcagcttga catctgcagc  
120  
tctgcccctg aggactgcac gtccttcagc atcaacgcct ccccaggggt ggtcgtggat  
180  
attgcccaca gccctccagc caagaagaaa tccacagggt cctccacatg gccctggac  
240  
cctggggtag aggtgaccct gacgatgaaa gcggccagtg gtagcacagg cgaccagaag  
300  
gttcagattt catactacgg acccaagact ccaccagtca aagctctact ctacctcacc  
360  
gcggtggaaa tctccctgtg cgcagacatc acccgccaccg gcaaagtga gccaaccaga  
420  
gctgtgaaag atcagaggac ctggacctgg ggcccttgtg gacaggggtgc catcctgctg  
480  
gtgaactgtg acagagacaa tctcgaatct tctgccatgg actgcgagga tgatgaagtg  
540  
cttgacagcg aagacctgca ggacatgtcg ctgatgacct tgagcacgaa gacccccaa  
600  
gacttcttca caaaccatac actggtgctc cacgtggcca ggtctgagat ggacaaagt  
660  
agggtgtttc aggccacacg gggcaaactg tcttccaagt gcagcgtagt cttgggtccc  
720  
aagtggccct ctactacct gatggtcccc ggtggaaagc acaacatgga cttctacgtg  
780  
gaggccctcg ctttcccgga caccgacttc ccggggctca ttaccctcac catctccctg  
840  
ctggacacgt ccaacctgga gctccccgag gctgtggtgt tccaagacag cgtggtcttc  
900  
cgcgtggcgc cctggatcat gacccccaac acccagcccc cgcaggagggt gtacgcgtgc  
960  
agtatttttg aaaatgagga cttcctgaag tcagtgacta ctctggccat gaaagccaag  
1020  
tgcaagctga ccatctgccc tgaggaggag aacatggatg accagtggat gcaggatgaa  
1080  
atggagatcg gctacatcca agccccacac aaaacgctgc ccgtggtctt cgactctcca  
1140  
aggaacagag gcctgaagga gtttcccata aaacgagtga tgggtccaga ttttggctat  
1200  
gtaactcgag ggccccaaac aggggggtatc agtggactgg actcctttgg gaacctggaa  
1260  
gtgagccccc cagtcacagt caggggcaag gaataccgcg tgggcaggat tctcttcggg  
1320  
gacagctgtt atcccagcaa tgacagccgg cagatgcacc aggccctgca ggacttcctc  
1380

agtgcccagc aggtgcaggc ccctgtgaag ctctattctg actggctgtc cgtgggccac  
 1440  
 gtggacgagt tcctgagctt tgtgccagca cccgacagga agggcttccg gctgctcctg  
 1500  
 gccagcccca ggtcctgcta caaactgttc caggagcagc agaatgaggg ccacggggag  
 1560  
 gccctgctgt tcgaagggat caagaaaaaa aaacagcaga aaataaagaa cattctgtca  
 1620  
 aacaagacat tgagagaaca taattcattt gtggagagat gcatcgactg gaaccgagag  
 1680  
 ctgctgaagc gggagctggg cctggccgag agtgacatca ttgacatccc gcagctcttc  
 1740  
 aagctcaaag agttctctaa ggcggaagct tttttcccca acatggtgaa catgctgggtg  
 1800  
 ctagggaagc acctgggcat cccaagccc ttcggggccc tcatcaacgg ccgctgctgc  
 1860  
 ctggaggaga aggtgtgttc cctgctggag ccactgggcc tccagtgcac cttcatcaac  
 1920  
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&lt;210&gt; 2696

&lt;211&gt; 663

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2696

Met	Ala	Gln	Gly	Thr	Leu	Ile	Arg	Val	Thr	Pro	Glu	Gln	Pro	Thr	His
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Ala	Val	Cys	Val	Leu	Gly	Thr	Leu	Thr	Gln	Leu	Asp	Ile	Cys	Ser	Ser
			20					25					30		
Ala	Pro	Glu	Asp	Cys	Thr	Ser	Phe	Ser	Ile	Asn	Ala	Ser	Pro	Gly	Val
		35					40					45			
Val	Val	Asp	Ile	Ala	His	Ser	Pro	Pro	Ala	Lys	Lys	Lys	Ser	Thr	Gly
	50					55					60				
Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
65					70					75				80	
Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
			85					90					95		
Tyr	Gly	Pro	Lys	Thr	Pro	Pro	Val	Lys	Ala	Leu	Leu	Tyr	Leu	Thr	Ala
		100						105					110		
Val	Glu	Ile	Ser	Leu	Cys	Ala	Asp	Ile	Thr	Arg	Thr	Gly	Lys	Val	Lys
		115					120					125			
Pro	Thr	Arg	Ala	Val	Lys	Asp	Gln	Arg	Thr	Trp	Thr	Trp	Gly	Pro	Cys

130	135	140
Gly Gln Gly Ala Ile Leu Leu Val Asn Cys Asp Arg Asp Asn Leu Glu		
145	150	155
Ser Ser Ala Met Asp Cys Glu Asp Asp Glu Val Leu Asp Ser Glu Asp		160
	165	170
Leu Gln Asp Met Ser Leu Met Thr Leu Ser Thr Lys Thr Pro Lys Asp		175
	180	185
Phe Phe Thr Asn His Thr Leu Val Leu His Val Ala Arg Ser Glu Met		190
	195	200
Asp Lys Val Arg Val Phe Gln Ala Thr Arg Gly Lys Leu Ser Ser Lys		205
	210	215
Cys Ser Val Val Leu Gly Pro Lys Trp Pro Ser His Tyr Leu Met Val		220
225	230	235
Pro Gly Gly Lys His Asn Met Asp Phe Tyr Val Glu Ala Leu Ala Phe		240
	245	250
Pro Asp Thr Asp Phe Pro Gly Leu Ile Thr Leu Thr Ile Ser Leu Leu		255
	260	265
Asp Thr Ser Asn Leu Glu Leu Pro Glu Ala Val Val Phe Gln Asp Ser		270
	275	280
Val Val Phe Arg Val Ala Pro Trp Ile Met Thr Pro Asn Thr Gln Pro		285
	290	295
Pro Gln Glu Val Tyr Ala Cys Ser Ile Phe Glu Asn Glu Asp Phe Leu		300
305	310	315
Lys Ser Val Thr Thr Leu Ala Met Lys Ala Lys Cys Lys Leu Thr Ile		320
	325	330
Cys Pro Glu Glu Glu Asn Met Asp Asp Gln Trp Met Gln Asp Glu Met		335
	340	345
Glu Ile Gly Tyr Ile Gln Ala Pro His Lys Thr Leu Pro Val Val Phe		350
	355	360
Asp Ser Pro Arg Asn Arg Gly Leu Lys Glu Phe Pro Ile Lys Arg Val		365
	370	375
Met Gly Pro Asp Phe Gly Tyr Val Thr Arg Gly Pro Gln Thr Gly Gly		380
385	390	395
Ile Ser Gly Leu Asp Ser Phe Gly Asn Leu Glu Val Ser Pro Pro Val		400
	405	410
Thr Val Arg Gly Lys Glu Tyr Pro Leu Gly Arg Ile Leu Phe Gly Asp		415
	420	425
Ser Cys Tyr Pro Ser Asn Asp Ser Arg Gln Met His Gln Ala Leu Gln		430
	435	440
Asp Phe Leu Ser Ala Gln Gln Val Gln Ala Pro Val Lys Leu Tyr Ser		445
	450	455
Asp Trp Leu Ser Val Gly His Val Asp Glu Phe Leu Ser Phe Val Pro		460
465	470	475
Ala Pro Asp Arg Lys Gly Phe Arg Leu Leu Leu Ala Ser Pro Arg Ser		480
	485	490
Cys Tyr Lys Leu Phe Gln Glu Gln Gln Asn Glu Gly His Gly Glu Ala		495
	500	505
Leu Leu Phe Glu Gly Ile Lys Lys Lys Lys Gln Gln Lys Ile Lys Asn		510
	515	520
Ile Leu Ser Asn Lys Thr Leu Arg Glu His Asn Ser Phe Val Glu Arg		525
	530	535
Cys Ile Asp Trp Asn Arg Glu Leu Leu Lys Arg Glu Leu Gly Leu Ala		540
545	550	555
Glu Ser Asp Ile Ile Asp Ile Pro Gln Leu Phe Lys Leu Lys Glu Phe		560

				565						570					575				
Ser	Lys	Ala	Glu	Ala	Phe	Phe	Pro	Asn	Met	Val	Asn	Met	Leu	Val	Leu				
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Gly	Lys	His	Leu	Gly	Ile	Pro	Lys	Pro	Phe	Gly	Pro	Val	Ile	Asn	Gly				
				595															
Arg	Cys	Cys	Leu	Glu	Glu	Lys	Val	Cys	Ser	Leu	Leu	Glu	Pro	Leu	Gly				
				610															
Leu	Gln	Cys	Thr	Phe	Ile	Asn	Asp	Phe	Phe	Thr	Tyr	His	Ile	Arg	His				
						630													
Gly	Glu	Val	His	Cys	Gly	Thr	Asn	Val	Arg	Arg	Lys	Pro	Phe	Ser	Phe				
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Lys	Trp	Trp	Asn	Met	Val	Pro													
				660															

&lt;210&gt; 2697

&lt;211&gt; 2468

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2697

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&lt;210&gt; 2698

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2698

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Gln Gly Ser Pro Gly Glu Ala Ser Gly Thr Met Ser Gly Glu Leu Pro
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Pro Asn Ile Asn Ile Lys Glu Pro Arg Trp Asp Gln Ser Thr Phe Ile
           20           25           30
Gly Arg Ala Asn His Phe Phe Thr Val Thr Asp Pro Arg Asn Ile Leu
           35           40           45
Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr
           50           55           60
Arg Gln Gly Ile Val Pro Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg
65           70           75           80
Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys
           85           90           95
Met Ile Leu Ile Gly Arg Met Ser Ala Gln Val Pro Met Asn Met Thr
           100          105          110
Ile Thr Gly Cys Met Met Thr Phe Tyr Arg Thr Thr Pro Ala Val Leu
           115          120          125
Phe Trp Gln Trp Ile Asn Gln Ser Phe Asn Ala Val Val Asn Tyr Thr
           130          135          140
Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala
145          150          155          160
Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala Leu Gly Leu Asn
           165          170          175
Ala Leu Thr Lys His Val Ser Pro Leu Ile Gly Arg Phe Val Pro Phe
           180          185          190
Ala Ala Val Ala Ala Ala Asn Cys Ile Asn Ile Pro Leu Met Arg Gln
           195          200          205
Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg
210          215          220
Leu Gly Glu Ser Ala Asn Ala Ala Lys Gln Ala Ile Thr Gln Val Val
225          230          235          240
Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe
           245          250          255
Ile Met Asn Thr Leu Glu Lys Lys Ala Phe Leu Lys Arg Phe Pro Trp
           260          265          270
Met Ser Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe
           275          280          285
Ala Thr Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Ser Ser Met Ser
290          295          300
Val Thr Ser Leu Glu Ala Glu Leu Gln Ala Lys Ile Gln Glu Ser His
305          310          315          320
Pro Glu Leu Arg Arg Val Tyr Phe Asn Lys Gly Leu
           325          330

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&lt;210&gt; 2699

&lt;211&gt; 974

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2699

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 960  
 aaaaaaaaaa aaaa  
 974

&lt;210&gt; 2700

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2700

Met	Pro	Leu	Pro	Asp	Thr	Met	Phe	Cys	Ala	Gln	Gln	Ile	His	Ile	Pro
1				5					10					15	
Pro	Glu	Leu	Pro	Asp	Ile	Leu	Lys	Gln	Phe	Thr	Lys	Ala	Ala	Ile	Arg
			20					25					30		
Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
		35					40					45			
Leu	Ser	Arg	Gly	Asp	Pro	Leu	Pro	Val	Lys	Asp	Arg	Met	Glu	Met	Pro
	50					55					60				
Val	Ala	Thr	Gln	Lys	Thr	Asp	Thr	Gly	Leu	Thr	Gln	Gly	Leu	Leu	Lys
65					70				75						80
Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
			85					90					95		
Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
		100					105					110			
Ala	Leu	Leu	Gln	Leu	Asp	Pro	Cys	Glu	Asn	Lys	Ile	Lys	Trp	Ile	Asn

	115		120		125
Phe	Leu	Ala	Leu	Gly	Cys
	130		135		140
Leu	Lys	His	Leu	Cys	Glu
145			150		155
Leu	Ala	Ser	Pro	Ser	Arg
		165		170	
					175

Asp

&lt;210&gt; 2701

&lt;211&gt; 646

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2701

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240
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646

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&lt;210&gt; 2702

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2702

Met	Gly	Leu	Arg	Thr	Ser	Glu	Leu	Leu	Pro	Cys	Asn	Trp	Arg	Lys	Asp
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Leu	Gly	Pro	Gly	Asp	Gln	Glu	Ser	Arg	Trp	Lys	Gln	Tyr	Leu	Glu	Asp
		20					25						30		
Glu	Arg	Ile	Ala	Leu	Phe	Leu	Gln	Asn	Glu	Glu	Phe	Met	Lys	Glu	Leu
		35				40					45				
Gln	Arg	Asn	Arg	Asp	Phe	Leu	Leu	Ala	Leu	Glu	Arg	Asp	Arg	Leu	Lys
	50			55						60					
Tyr	Glu	Ser	Gln	Lys	Ser	Lys	Ser	Ser	Ser	Val	Ala	Val	Gly	Asn	Asp



<210> 2705  
 <211> 843  
 <212> DNA  
 <213> Homo sapiens

<400> 2705  
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 840  
 atg  
 843

<210> 2706  
 <211> 251  
 <212> PRT  
 <213> Homo sapiens

<400> 2706  
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 Thr Val Thr Asp Pro Arg Asn Leu Leu Leu Ser Gly Ala Gln Leu Glu  
 35 40 45  
 Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Ala Gly Val Val Thr Pro  
 50 55 60  
 Gly Ile Thr Glu Asp Gln Leu Trp Arg Ala Lys Tyr Val Tyr Asp Ser  
 65 70 75 80  
 Ala Phe His Pro Asp Thr Gly Glu Lys Val Val Leu Ile Gly Arg Met

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660
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780

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1951



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1060	1065	1070
Leu Ser Leu Gln Arg Ala His Glu Gln Ala Val Lys Glu Asn Val Lys		
1075	1080	1085
Met Ala Thr Glu Ile Ser Arg Leu Gln Gln Arg Leu Gln Lys Leu Glu		
1090	1095	1100
Pro Gly Leu Val Met Ser Ser Cys Leu Asp Glu Pro Ala Thr Glu Phe		
1105	1110	1115
Phe Gly Asn Thr Ala Glu Gln Thr Glu Pro Phe Leu Gln Gln Asn Arg		
1125	1130	1135
Thr Lys Gln Val Glu Gly Val Thr Arg Arg His Val Leu Ser Asp Leu		
1140	1145	1150
Glu Asp Asp Glu Val Arg Asp Leu Gly Ser Thr Gly Thr Ser Ser Val		
1155	1160	1165
Gln Arg Gln Glu Val Lys Ile Glu Glu Ser Glu Ala Ser Val Glu Gly		
1170	1175	1180
Phe Ser Glu Leu Glu Asn Ser Glu Glu Thr Arg Thr Glu Ser Trp Glu		
1185	1190	1195
Leu Lys Asn His Ile Ser Leu Leu Gln Glu Gln Leu Met Met Phe Cys		
1205	1210	1215
Ala Asp Cys Asp Leu Ala Ser Glu Lys Lys Gln Glu Leu Leu Phe Asp		
1220	1225	1230
Val Ser Val Leu Lys Lys Lys Leu Lys Ile Leu Glu Arg Ile Pro Glu		
1235	1240	1245
Ala Ser Pro Arg Tyr Lys Leu Leu Tyr Glu Asp Val Ser Arg Glu Asn		
1250	1255	1260
Asp Cys Leu Gln Glu Glu Leu Glu Met Met Glu Thr Arg Tyr Asp Glu		



1265	1270	1275	1280
Ala Leu Glu Asn Asn Lys Glu Leu Thr	Ala Glu Val Phe Arg Leu Gln		
1285	1290	1295	
Asp Glu Leu Lys Lys Met Glu Glu Val Thr Glu Thr Phe Leu Ser Leu			
1300	1305	1310	
Glu Lys Ser Tyr Asp Glu Val Lys Ile Glu Asn Glu Glu Leu Asn Val			
1315	1320	1325	
Leu Val Leu Arg Leu Gln Gly Lys Ile Glu Lys Leu Xaa Thr Arg Ala			
1330	1335	1340	
Trp Ser Ser Gly Val Thr Ala Ala Tyr Gly Lys Xaa Ser Leu Glu Asn			
1345	1350	1355	1360
Leu Glu Ile Glu Pro Asp Gly Asn Ile Leu Gln Leu Asn Gln Thr Leu			
1365	1370	1375	
Glu Glu Cys Val Pro Arg Val Arg Ser Val His His Val Ile Glu Glu			
1380	1385	1390	
Cys Lys Gln Glu Asn Gln Tyr Leu Glu Gly Asn Thr Gln Leu Leu Glu			
1395	1400	1405	
Lys Val Lys Ala His Glu Ile Ala Trp Leu His Gly Thr Ile Gln Thr			
1410	1415	1420	
His Gln Glu Arg Pro Arg Val Gln Asn Gln Val Ile Leu Glu Glu Asn			
1425	1430	1435	1440
Thr Thr Leu Leu Gly Phe Gln Asp Lys His Phe Gln His Gln Ala Thr			
1445	1450	1455	
Ile Ala Glu Leu Glu Leu Glu Lys Thr Lys Leu Gln Glu Leu Thr Arg			
1460	1465	1470	
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1475	1480	1485	
Ser Pro Gly Lys Lys Glu Glu Glu Leu Lys Ala Met Met His Asp Leu			
1490	1495	1500	
Gln Ile Pro Cys Ser Glu Met Gln Gln Lys Val Glu Leu Leu Lys Tyr			
1505	1510	1515	1520
Glu Ser Glu Lys Leu Gln Gln Glu Asn Ser Ile Leu Arg Asn Glu Ile			
1525	1530	1535	
Thr Thr Leu Asn Glu Glu Asp Ser Ile Ser Asn Leu Lys Leu Gly Thr			
1540	1545	1550	
Leu Asn Gly Ser Gln Glu Glu Met Trp Gln Lys Thr Glu Ser Val Lys			
1555	1560	1565	
Gln Glu Asn Ala Ala Val Leu Lys Met Val Glu Asn Leu Lys Lys Gln			
1570	1575	1580	
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1585	1590	1595	1600
Glu Leu Ser Gln Lys Asn Ser Pro Asn Gln Glu Lys Leu Gln Glu Leu			
1605	1610	1615	
Asn Gln Leu Leu Thr Glu Met Leu Cys Gln Lys Glu Lys Glu Pro Gly			
1620	1625	1630	
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1635	1640	1645	
Glu Pro Glu Arg Cys Lys Val Gln Ser Ser Thr Leu Val Ser Ser Leu			
1650	1655	1660	
Glu Ala Glu Leu Ser Glu Val Lys Ile Gln Thr His Ile Val Gln Gln			
1665	1670	1675	1680
Glu Asn Pro Leu Leu Gln Asp Glu Leu Glu Lys Met Lys Gln Leu His			
1685	1690	1695	
Arg Cys Pro Asp Leu Ser Asn Phe Gln Gln Lys Ile Ser Ser Val Leu			

1700	1705	1710
Ser Tyr Asn Glu Lys Leu Leu Lys Glu Lys Glu Ala Leu Ser Glu Glu		
1715	1720	1725
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1730	1735	1740
Arg Ile Ala Thr Met Lys Gln Glu Gln Lys Ser Trp Glu His Gln Ser		
1745	1750	1755
Ala Ser Leu Lys Thr Gln Leu Val Ala Ser Gln Glu Lys Val Gln Asn		
1765	1770	1775
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1780	1785	1790
Ser Asp Pro Arg Val Thr Gln Gln Glu Lys Glu Ala Leu Lys Gln Glu		
1795	1800	1805
Val Met Pro Leu His Lys Gln Leu Gln Asn Ser Val Xaa Lys Ser Trp		
1810	1815	1820
Ala Pro Glu Ile Ala Thr His Pro Ser Gly Leu His Asn Gln Gln Lys		
1825	1830	1835
Arg Leu Ser Trp Asp Lys Leu Asp His Leu Met Asn Glu Glu Gln Gln		
1845	1850	1855
Leu Leu Trp Gln Glu Asn Glu Arg Leu Gln Thr Met Val Gln Asn Thr		
1860	1865	1870
Lys Ala Glu Leu Thr His Ser Arg Glu Lys Val Arg Gln Leu Glu Ser		
1875	1880	1885
Asn Leu Leu Pro Lys His Gln Lys His Leu Asn Pro Ser Gly Thr Met		
1890	1895	1900
Asn Pro Thr Glu Gln Glu Lys Leu Ser Leu Lys Arg Glu Cys Asp Gln		
1905	1910	1915
Phe Gln Lys Glu Gln Ser Pro Ala Asn Arg Lys Val Ser Gln Met Asn		
1925	1930	1935
Ser Leu Glu Gln Glu Leu Glu Thr Ile His Leu Glu Asn Glu Gly Leu		
1940	1945	1950
Lys Lys Lys Gln Val Lys Leu Asp Glu Gln Leu Met Glu Met Gln His		
1955	1960	1965
Leu Arg Ser Thr Ala Thr Pro Ser Pro Ser Pro His Ala Trp Asp Leu		
1970	1975	1980
Gln Leu Leu Gln Gln Gln Ala Cys Pro Met Val Pro Arg Glu Gln Phe		
1985	1990	1995
Leu Gln Leu Gln Arg Gln Leu Leu Gln Ala Glu Arg Ile Asn Gln His		
2005	2010	2015
Leu Gln Glu Glu Leu Glu Asn Arg Thr Ser Glu Thr Asn Thr Pro Gln		
2020	2025	2030
Gly Asn Gln Glu Gln Leu Val Thr Val Met Glu Glu Arg Met Ile Glu		
2035	2040	2045
Val Glu Gln Lys Leu Lys Leu Val Lys Arg Leu Leu Gln Glu Lys Val		
2050	2055	2060
Asn Gln Leu Lys Glu Gln Val Ser Leu Pro Gly His Leu Cys Ser Pro		
2065	2070	2075
Thr Ser His Ser Ser Phe Asn Ser Ser Phe Thr Ser Leu Tyr Cys His		
2085	2090	2095

&lt;210&gt; 2713

&lt;211&gt; 2066

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2713

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420  
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720  
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780  
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 1920  
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<210> 2714  
 <211> 214  
 <212> PRT  
 <213> Homo sapiens

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 Leu Val Glu Thr Ser Gly Ile Ser Ile Tyr Arg Leu Leu Asp Lys Lys  
 35 40 45  
 Thr Gly Leu Tyr Glu Tyr Lys Val Phe Gly Val Leu Glu Asp Cys Ser  
 50 55 60  
 Pro Thr Leu Leu Ala Asp Ile Tyr Met Asp Ser Asp Tyr Arg Lys Gln  
 65 70 75 80  
 Trp Asp Gln Tyr Val Lys Glu Leu Tyr Glu Gln Glu Cys Asn Gly Glu  
 85 90 95  
 Thr Val Val Tyr Trp Glu Val Lys Tyr Pro Phe Pro Met Ser Asn Arg  
 100 105 110  
 Asp Tyr Val Tyr Leu Arg Gln Arg Arg Asp Leu Asp Met Glu Gly Arg  
 115 120 125  
 Lys Ile His Val Ile Leu Ala Arg Ser Thr Ser Met Pro Gln Leu Gly  
 130 135 140  
 Glu Arg Ser Gly Val Ile Arg Val Lys Gln Tyr Lys Gln Ser Leu Ala  
 145 150 155 160  
 Ile Glu Ser Asp Gly Lys Lys Gly Ser Lys Val Phe Met Tyr Tyr Phe  
 165 170 175  
 Asp Asn Pro Gly Gly Gln Ile Pro Ser Trp Leu Ile Asn Trp Ala Ala  
 180 185 190  
 Lys Asn Gly Val Pro Asn Phe Leu Lys Asp Met Ala Arg Ala Cys Gln  
 195 200 205  
 Asn Tyr Leu Lys Lys Thr  
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<210> 2715  
<211> 378  
<212> DNA  
<213> Homo sapiens

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120  
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180  
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240  
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378

<210> 2716  
<211> 126  
<212> PRT  
<213> Homo sapiens

<400> 2716  
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Lys Ile Lys Gln Ile Met His His Phe Ile Pro Asp Leu Leu Phe Ala  
20 25 30  
Gln Arg Gly Asp Leu Ser Asp Val Glu Glu Glu Glu Glu Glu Met  
35 40 45  
Asp Val Asp Glu Ala Thr Gly Ala Val Lys Lys His Asn Gly Val Gly  
50 55 60  
Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln  
65 70 75 80  
Lys Leu Arg Gly Met Asp Glu Val Tyr Asn Leu Phe Tyr Val Asn Asn  
85 90 95  
Asn Trp Tyr Ile Phe Met Arg Leu His Gln Ile Leu Cys Leu Arg Leu  
100 105 110  
Leu Arg Ile Cys Ser Gln Ala Glu Arg Gln Ile Glu Glu Glu  
115 120 125

<210> 2717  
<211> 2076  
<212> DNA  
<213> Homo sapiens

<400> 2717  
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120

atacagattt gaacactatg aaaaagatca agacaagtac catgaaaaac tggtccttca  
180  
aatgaaaggg ggaaaattga gggcaatgtg aggctttgcc tgctgtcggg gacaaatcaa  
240  
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300  
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360  
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420  
gaaatgaaag agacttgatg agtaaaatgt gatagttgtt aacattgccc cccaaaagt  
480  
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540  
tgacttcctt ggttatcaaa taattacata ttctgaccct tcagaaggac accaaaagct  
600  
acaattttat gtttcaatcc atctgtacct tcatttgcaa tggtcagct agtttactca  
660  
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720  
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780  
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1200  
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1260  
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1320  
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1380  
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1560  
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1620  
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1680  
caaacaaaat caagttagga aaagcactga ttttatccaa gtaggtcaat ttgaggcaag  
1740

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 1920  
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 1980  
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 <211> 110  
 <212> PRT  
 <213> Homo sapiens

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 Glu Gly Pro Arg Pro Glu Asn Thr Leu Gly Leu Ser Ser Pro Ala Gln  
 35 40 45  
 Thr Thr Gly Glu Gly Ala Gly His Arg Pro Leu Thr Ile Leu His Pro  
 50 55 60  
 Lys Thr Gly Gly Gln Gly Ser Asp Ala Thr Leu Leu Phe Val Lys Tyr  
 65 70 75 80  
 Gly Thr Thr Phe Phe Val Leu Phe Glu Val Ser Ser Gly Ser Lys Leu  
 85 90 95  
 Ser Lys Trp Leu Lys Asn Ala Lys Cys Asn Tyr Thr Asp Leu  
 100 105 110

<210> 2719  
 <211> 546  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180  
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 300  
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 360  
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 420

gccaccagcg tcctttttga gagcacccca gtttatccca atgctggtcg gtactgggag  
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<210> 2720  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

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 His Val Leu Val Ala His Arg Thr Asp Asn Lys Val His Met Gly Asp  
 35 40 45  
 Leu Asp Val Pro Leu Glu Gln Glu Met Ala Lys Glu Asp Pro Val Cys  
 50 55 60  
 Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr  
 65 70 75 80  
 Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr Gln Ala Gly  
 85 90 95  
 Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe Asp His Gln  
 100 105 110  
 Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly  
 115 120 125  
 His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala Thr Ser Val  
 130 135 140  
 Leu Phe Glu Ser Thr Pro Val Tyr Pro Asn Ala Gly Arg Tyr Trp Glu  
 145 150 155 160  
 Thr Val Glu Arg Leu Lys Ile Asn Gln Phe Tyr Gly Ala Pro Thr Ala  
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 Val Arg Leu Leu Leu Lys  
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<210> 2721  
 <211> 5912  
 <212> DNA  
 <213> Homo sapiens

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 240  
 tccaactggc aggacaaaag catgggggtgt gagaatggcc atgtgcccct ctactcctcc  
 300



tcattctgtcc ccaccacaat caatacgatt ggaaccagca caagtacaaa tgttccagcc  
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&lt;210&gt; 2722

&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2722

Arg	Gln	Leu	Leu	Ser	Tyr	Ala	Leu	Ile	His	Pro	Ala	Thr	Ser	Leu	Glu
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			20					25					30		
Ser	Thr	Ser	Phe	Gly	Gly	Gln	Asn	Arg	Gly	Arg	Ser	Asp	Ser	Val	Asp
		35				40						45			
Tyr	Gly	Gln	Thr	His	Tyr	Tyr	His	Gln	Arg	Gln	Asn	Ser	Asp	Asp	Lys
	50					55					60				
Leu	Asn	Gly	Trp	Gln	Asn	Ser	Arg	Asp	Ser	Gly	Ile	Cys	Ile	Asn	Ala
65				70						75				80	
Ser	Asn	Trp	Gln	Asp	Lys	Ser	Met	Gly	Cys	Glu	Asn	Gly	His	Val	Pro
			85					90					95		
Leu	Tyr	Ser	Ser	Ser	Ser	Val	Pro	Thr	Thr	Ile	Asn	Thr	Ile	Gly	Thr
			100					105					110		
Ser	Thr	Ser	Thr	Asn	Val	Pro	Ala	Trp	Leu	Lys	Ser	Leu	Arg	Leu	His
		115				120						125			
Lys	Tyr	Ala	Ala	Leu	Phe	Ser	Gln	Met	Thr	Tyr	Glu	Glu	Met	Met	Ala
		130				135					140				
Leu	Thr	Glu	Cys	Gln	Leu	Glu	Ala	Gln	Asn	Val	Thr	Lys	Gly	Ala	Arg
145				150					155					160	
His	Lys	Ile	Val	Ile	Ser	Ile	Gln	Lys	Leu	Lys	Glu	Arg	Gln	Asn	Leu

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120
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&lt;210&gt; 2724

&lt;211&gt; 404

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2724

Gly	Ala	Ala	Asp	Ser	Lys	Val	His	Val	His	Asp	Leu	Thr	Val	Lys	Glu
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Thr	Ile	His	Met	Phe	Gly	Asp	His	Thr	Asn	Arg	Val	Lys	Arg	Ile	Ala
			20					25					30		
Thr	Ala	Pro	Met	Trp	Pro	Asn	Thr	Phe	Trp	Ser	Ala	Ala	Glu	Asp	Gly
		35					40					45			
Leu	Ile	Arg	Gln	Tyr	Asp	Leu	Arg	Glu	Asn	Ser	Lys	His	Ser	Glu	Val
	50					55					60				
Leu	Ile	Asp	Leu	Thr	Glu	Tyr	Cys	Gly	Gln	Leu	Val	Glu	Ala	Lys	Cys

65		70		75		80
Leu Thr Val Asn Pro Gln Asp Asn Asn Cys Leu Ala Val Gly Ala Ser						
	85		90		95	
Gly Pro Phe Val Arg Leu Tyr Asp Ile Arg Met Ile His Asn His Arg						
	100		105		110	
Lys Ser Met Lys Gln Ser Pro Ser Ala Gly Val His Thr Phe Cys Asp						
	115		120		125	
Arg Gln Lys Pro Leu Pro Asp Gly Ala Ala Gln Tyr Tyr Val Ala Gly						
	130		135		140	
His Leu Pro Val Lys Leu Pro Asp Tyr Asn Asn Arg Leu Arg Val Leu						
	145		150		155	
Val Ala Thr Tyr Val Thr Phe Ser Pro Asn Gly Thr Glu Leu Leu Val						
	165		170		175	
Asn Met Gly Gly Glu Gln Val Tyr Leu Phe Asp Leu Thr Tyr Lys Gln						
	180		185		190	
Arg Pro Tyr Thr Phe Leu Leu Pro Arg Lys Cys His Ser Ser Gly Glu						
	195		200		205	
Val Gln Asn Gly Lys Met Ser Thr Asn Gly Val Ser Asn Gly Val Ser						
	210		215		220	
Asn Gly Leu His Leu His Ser Asn Gly Phe Arg Leu Pro Glu Ser Arg						
	225		230		235	
Gly His Val Ser Pro Gln Val Glu Leu Pro Pro Tyr Leu Glu Arg Val						
	245		250		255	
Lys Gln Gln Ala Asn Glu Ala Phe Ala Cys Gln Gln Trp Thr Gln Ala						
	260		265		270	
Ile Gln Leu Tyr Ser Lys Ala Val Gln Arg Ala Pro His Asn Ala Met						
	275		280		285	
Leu Tyr Gly Asn Arg Ala Ala Ala Tyr Met Lys Arg Lys Trp Asp Gly						
	290		295		300	
Asp His Tyr Asp Ala Leu Arg Asp Cys Leu Lys Ala Ile Ser Leu Asn						
	305		310		315	
Pro Cys His Leu Lys Ala His Phe Arg Leu Ala Arg Cys Leu Phe Glu						
	325		330		335	
Leu Lys Tyr Val Ala Glu Ala Leu Glu Cys Leu Asp Asp Phe Lys Gly						
	340		345		350	
Lys Phe Pro Glu Gln Ala His Ser Ser Ala Cys Asp Ala Leu Gly Arg						
	355		360		365	
Asp Ile Thr Ala Ala Leu Phe Ser Lys Asn Asp Gly Glu Glu Lys Lys						
	370		375		380	
Gly Pro Gly Gly Gly Ala Pro Val Arg Leu Arg Ser Thr Ser Arg Lys						
	385		390		395	
Gly Cys Thr Arg					400	

&lt;210&gt; 2725

&lt;211&gt; 856

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2725

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120



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856

&lt;210&gt; 2726

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2726

Met	Ala	Ser	Pro	Arg	Thr	Arg	Lys	Val	Leu	Lys	Glu	Val	Arg	Val	Gln
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Asp	Glu	Asn	Asn	Val	Cys	Phe	Glu	Cys	Gly	Ala	Phe	Asn	Pro	Gln	Trp
		20						25					30		
Val	Ser	Val	Thr	Tyr	Gly	Ile	Trp	Ile	Cys	Leu	Glu	Cys	Ser	Gly	Arg
		35					40					45			
His	Arg	Gly	Leu	Gly	Val	His	Leu	Ser	Phe	Val	Arg	Ser	Val	Thr	Met
		50				55					60				
Asp	Lys	Trp	Lys	Asp	Ile	Glu	Leu	Glu	Lys	Met	Lys	Ala	Gly	Gly	Asn
65					70					75				80	
Ala	Lys	Phe	Arg	Glu	Phe	Leu	Glu	Ser	Gln	Glu	Asp	Tyr	Asp	Pro	Cys
			85						90					95	
Trp	Ser	Leu	Gln	Glu	Lys	Tyr	Asn	Ser	Arg	Ala	Ala	Ala	Leu	Phe	Arg
		100						105					110		
Asp	Lys	Val	Val	Ala	Leu	Ala	Glu	Gly	Arg	Glu	Trp	Ser	Leu	Glu	Ser
		115					120					125			
Ser	Pro	Ala	Gln	Asn	Trp	Thr	Pro	Pro	Gln	Pro	Arg	Thr	Leu	Pro	Ser
		130				135					140				
Met	Val	His	Arg												
145															



<210> 2727  
<211> 1119  
<212> DNA  
<213> Homo sapiens

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720  
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780  
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900  
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960  
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1020  
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1119

<210> 2728  
<211> 221  
<212> PRT  
<213> Homo sapiens

<400> 2728  
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Ile Thr Thr Leu Asp Pro Gly Met Ala Pro Tyr Ile Lys Ser Gly Gly

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<210> 2729
<211> 393
<212> DNA
<213> Homo sapiens
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<210> 2730
<211> 92
<212> PRT
<213> Homo sapiens
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1970

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Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys			
35	40	45	
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp			
50	55	60	
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu			
65	70	75	80
Val Glu Thr Asp Asn Gly Leu Pro Asn Thr Ile Ser			
85	90		

&lt;210&gt; 2731

&lt;211&gt; 447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2731

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420
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447

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&lt;210&gt; 2732

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2732

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Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu			
20	25	30	
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys			
35	40	45	
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly			
50	55	60	
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu			
65	70	75	80
Ala Ala Asn Asp Phe Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys			
85	90	95	
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys			

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<212> DNA  
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 50 55 60  
 Gln Ala Glu Thr Arg Glu Ala Arg Glu Ala Ala Arg Ser Pro Asp Lys  
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 Pro Gly Gly Ser Pro Ser Ala Ser Arg Arg Lys Gly Arg Ala Ser Glu  
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1975

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Trp Ser Trp Asp Gly	Asp Pro Asp Ala Glu	Ala Gly Leu Ala Pro Gly		
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&lt;210&gt; 2735

&lt;211&gt; 1666

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2735

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720

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<211> 218

<212> PRT

<213> Homo sapiens

<400> 2736

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Gln	Ala	His	Arg	Lys	Glu	Leu	Glu	Gly	Leu	Arg	Met	Arg	Ala	Ser	Asn				
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 <212> DNA  
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<210> 2738  
 <211> 299  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2738

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Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser
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Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val
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Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln
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Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr
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Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu
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225          230          235          240
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&lt;210&gt; 2739

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2739

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&lt;210&gt; 2740

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2740

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Ile	Ile	Ser	Gly	Val	Val	Ser	Leu	Phe	Ile	Phe	Gly	Phe	Cys	Trp	Leu			
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Ser	Pro	Ala	Leu	Gln	Asp	Leu	Gln	Ala	Thr	Glu	Ala	Asn	Cys	Thr	Val			
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Gly	Ala	Asp	Cys	Arg	Gly	Thr	Ser	Gln	Tyr	Pro	Cys	Val	Gln	Val	Tyr			
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Val	Asn	Asn	Ser	Glu	Ser	Asn	Ser	Arg	Ala	Leu	Leu	His	Ser	Asp	Glu			
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His	Gln	Leu	Leu	Thr	Asn	Pro	Lys	Cys	Ser	Tyr	Ile	Pro	Pro	Cys	Lys			
	115					120						125						
Arg	Glu	Asn	Gln	Lys	Asn	Leu	Glu	Ser	Val	Met	Asn	Trp	Gln	Gln	Tyr			
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Trp	Lys	Asp	Glu	Ile	Gly	Ser	Gln	Pro	Phe	Thr	Cys	Tyr	Phe	Asn	Gln			
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Val	Leu	Leu	His	Cys	Phe	Leu	Trp	Pro	Leu	Val	Thr	Phe	Val	Val	Gly			
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Val	Leu	Ile	Val	Val	Leu	Thr	Ile	Cys	Ala	Lys	Ser	Leu	Ala	Val	Lys			
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&lt;210&gt; 2741

&lt;211&gt; 1487

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2741

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&lt;210&gt; 2742

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2742

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Lys	Phe	Ser	Cys	Cys	Gly	Gly	Ile	Ser	Tyr	Lys	Asp	Trp	Ser	Gln	Asn
		35					40					45			
Met	Tyr	Phe	Asn	Cys	Ser	Glu	Asp	Asn	Pro	Ser	Arg	Glu	Arg	Cys	Ser
	50					55					60				
Val	Pro	Tyr	Ser	Cys	Cys	Leu	Pro	Thr	Pro	Asp	Gln	Ala	Val	Ile	Asn
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Thr	Met	Cys	Gly	Gln	Gly	Met	Gln	Ala	Phe	Asp	Tyr	Leu	Glu	Ala	Ser
				85					90					95	
Lys	Val	Ile	Tyr	Thr	Asn	Gly	Cys	Ile	Asp	Lys	Leu	Val	Asn	Trp	Ile
		100						105					110		
His	Ser	Asn	Leu	Phe	Leu	Leu	Gly	Gly	Val	Ala	Leu	Gly	Leu	Ala	Ile
		115					120					125			
Pro	Gln	Leu	Val	Gly	Ile	Leu	Leu	Ser	Gln	Ile	Leu	Val	Asn	Gln	Ile

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Gln Ser Pro Pro Gly Ala Ser Arg Asp Trp Ser Val Pro Ser Pro Pro  
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<213> Homo sapiens

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Ser Gly Glu Lys Leu Pro Asp Gln Pro Phe Thr His His Ser Gln Glu  
35 40 45  
Gly Pro Phe Pro Pro Gly Arg Glu Thr Ser Arg Pro Ala Pro His Thr  
50 55 60  
Thr Ala Lys Arg Gly Leu Ser His Leu Glu Arg Asn Phe Gln Thr Ser  
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&lt;210&gt; 2748

&lt;211&gt; 205

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2748

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			20					25						30	
Trp	Thr	Gly	Ala	Phe	Trp	Ile	Pro	Arg	Pro	Pro	Ala	Gly	Ser	Pro	Lys
		35					40					45			
Gly	Cys	Phe	Ala	Cys	Val	Ser	Lys	Pro	Pro	Ala	Leu	Gln	Ala	Pro	Ala
	50					55					60				
Ala	Pro	Ala	Pro	Glu	Pro	Ser	Ala	Ser	Pro	Pro	Met	Ala	Pro	Thr	Leu
65					70					75				80	
Phe	Pro	Met	Glu	Ser	Lys	Ser	Ser	Lys	Thr	Asp	Ser	Val	Arg	Ala	Ala
			85					90						95	
Gly	Ala	Pro	Pro	Ala	Cys	Lys	His	Leu	Ala	Glu	Lys	Lys	Thr	Met	Thr

			100					105					110				
Asn	Pro	Thr	Thr	Val	Ile	Glu	Val	Tyr	Pro	Asp	Thr	Thr	Glu	Val	Asn		
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Asp	Tyr	Tyr	Leu	Trp	Ser	Ile	Phe	Asn	Phe	Val	Tyr	Leu	Asn	Phe	Cys		
		130					135					140					
Cys	Leu	Gly	Phe	Ile	Ala	Leu	Ala	Tyr	Ser	Leu	Lys	Val	Arg	Asp	Lys		
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Lys	Leu	Leu	Asn	Asp	Leu	Asn	Gly	Ala	Val	Glu	Asp	Ala	Lys	Thr	Ala		
			165						170					175			
Arg	Leu	Phe	Asn	Ile	Thr	Ser	Ser	Ala	Leu	Ala	Ala	Ser	Cys	Ile	Ile		
			180					185					190				
Leu	Val	Phe	Ile	Phe	Leu	Arg	Tyr	Pro	Leu	Thr	Asp	Tyr					
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&lt;210&gt; 2749

&lt;211&gt; 2050

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2749

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<211> 332

<212> PRT

<213> Homo sapiens

<400> 2750

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Cys	Thr	Ala	Arg	Ile	Trp	Asp	Leu	Arg	Ser	Arg	Asn	Leu	Gln	Cys	Gln				
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&lt;210&gt; 2751

&lt;211&gt; 1877

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2751

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&lt;210&gt; 2752

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2752

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 Thr Pro Ala His Ala Pro Thr Xaa Pro Glu Thr Ala Arg Ser Ala Arg  
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 Thr Ala Pro Arg Ser Ala Ile Thr Arg Arg Ala Phe Thr Ser Thr Arg  
 35 40 45  
 Pro Pro Pro Thr Thr Arg Thr Val Ala Ser Ser Gly Thr His Thr Ser  
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 Gly Leu Ser Pro Thr Ala Ser Arg Pro Ala Arg Cys Arg Ala Pro Gly  
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&lt;210&gt; 2753

&lt;211&gt; 2561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2753

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&lt;210&gt; 2754

&lt;211&gt; 731

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2754

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Cys His Thr Val Val Pro Glu Lys Asp Gly Asp Asn Ile Ile Tyr Gln  
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Ala Ser Ser Pro Asp Glu Ala Ala Leu Val Lys Gly Ala Lys Lys Leu  
65 70 75 80  
Gly Phe Val Phe Thr Ala Arg Thr Pro Phe Ser Val Ile Ile Glu Ala  
85 90 95  
Met Gly Gln Glu Gln Thr Phe Gly Ile Leu Asn Val Leu Glu Phe Ser  
100 105 110  
Ser Asp Arg Lys Arg Met Ser Val Ile Val Arg Thr Pro Ser Gly Arg  
115 120 125  
Leu Arg Leu Tyr Cys Lys Gly Ala Asp Asn Val Ile Phe Glu Arg Leu  
130 135 140  
Ser Lys Asp Ser Lys Tyr Met Glu Glu Thr Leu Cys His Leu Glu Tyr  
145 150 155 160  
Phe Ala Thr Glu Gly Leu Arg Thr Leu Cys Val Ala Tyr Ala Asp Leu  
165 170 175  
Ser Glu Gly Asn Glu Tyr Glu Glu Trp Leu Lys Val Tyr Gln Glu Ala  
180 185 190  
Ser Thr Ile Leu Lys Asp Arg Ala Gln Arg Leu Glu Glu Cys Tyr Glu  
195 200 205  
Ile Ile Glu Lys Asn Leu Leu Leu Leu Gly Ala Thr Ala Ile Glu Asp  
210 215 220  
Arg Leu Gln Ala Gly Val Pro Glu Thr Ile Ala Thr Leu Leu Lys Ala  
225 230 235 240  
Glu Ile Lys Ile Trp Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Ile  
245 250 255  
Asn Ile Gly Tyr Ser Cys Arg Leu Val Ser Gln Asn Met Ala Leu Ile  
260 265 270  
Leu Leu Lys Gly Asp Ser Leu Asp Ala Thr Arg Ala Ala Ile Thr Gln  
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305 310 315 320  
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325 330 335  
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340 345 350  
Lys Arg Val Lys Ala Ile Thr Leu Ala Ile Gly Asp Gly Ala Asn Asp  
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Val Gly Met Ile Gln Thr Ala His Val Gly Val Gly Ile Ser Gly Asn  
370 375 380  
Glu Gly Met Gln Ala Thr Asn Asn Ser Asp Tyr Ala Ile Ala Gln Phe



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          420          425          430
Tyr Ile Ile Glu Leu Trp Phe Ala Phe Val Asn Gly Phe Ser Gly Gln
          435          440          445
Ile Leu Phe Glu Arg Trp Cys Ile Gly Leu Tyr Asn Val Ile Phe Thr
          450          455          460
Ala Leu Pro Pro Phe Thr Leu Gly Ile Phe Glu Arg Ser Cys Thr Gln
465          470          475          480
Glu Ser Met Leu Arg Phe Pro Gln Leu Tyr Lys Ile Thr Gln Asn Gly
          485          490          495
Glu Gly Phe Asn Thr Lys Val Phe Trp Gly His Cys Ile Asn Ala Leu
          500          505          510
Val His Ser Leu Ile Leu Phe Trp Phe Pro Met Lys Ala Leu Glu His
          515          520          525
Asp Thr Val Leu Thr Ser Gly His Ala Thr Asp Tyr Leu Phe Val Gly
          530          535          540
Asn Ile Val Tyr Thr Tyr Val Val Val Thr Val Cys Leu Lys Ala Gly
545          550          555          560
Leu Glu Thr Thr Ala Trp Thr Lys Phe Ser His Leu Ala Val Trp Gly
          565          570          575
Ser Met Leu Thr Trp Leu Val Phe Phe Gly Ile Tyr Ser Thr Ile Trp
          580          585          590
Pro Thr Ile Pro Ile Ala Pro Asp Met Arg Gly Gln Ala Thr Met Val
          595          600          605
Leu Ser Ser Ala His Phe Trp Leu Gly Leu Phe Leu Val Pro Thr Ala
          610          615          620
Cys Leu Ile Glu Asp Val Ala Trp Arg Ala Ala Lys His Thr Cys Lys
625          630          635          640
Lys Thr Leu Leu Glu Glu Val Gln Glu Leu Glu Thr Lys Ser Arg Val
          645          650          655
Leu Gly Lys Ala Val Leu Arg Asp Ser Asn Gly Lys Arg Leu Asn Glu
          660          665          670
Arg Asp Arg Leu Ile Lys Arg Leu Gly Arg Lys Thr Pro Pro Thr Leu
          675          680          685
Phe Arg Gly Ser Ser Leu Gln Gln Gly Val Pro His Gly Tyr Ala Phe
          690          695          700
Ser Gln Glu Glu His Gly Ala Val Ser Gln Glu Glu Val Ile Arg Ala
705          710          715          720
Tyr Asp Thr Thr Lys Lys Lys Ser Arg Lys Lys
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&lt;210&gt; 2755

&lt;211&gt; 4795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2755

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4795

&lt;210&gt; 2756

&lt;211&gt; 550

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2756

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Thr Glu Ser Asp Ala Pro Asn His Tyr Gln Ala Val Cys Arg Ala Leu
      20           25           30
Phe Ala Glu Thr Met Glu Leu His Thr Phe Leu Thr Lys Ile Lys Ser
      35           40           45
Ala Lys Glu Asn Leu Lys Lys Ile Gln Glu Met Glu Lys Ser Asp Glu
      50           55           60
Ser Ser Thr Asp Leu Glu Glu Leu Lys Asn Ala Asp Trp Ala Arg Phe
65           70           75           80
Trp Val Gln Val Met Arg Asp Leu Arg Asn Gly Val Lys Leu Lys Lys
      85           90           95
Val Gln Glu Arg Gln Tyr Asn Pro Leu Pro Ile Glu Tyr Gln Leu Thr
      100          105          110
Pro Tyr Glu Met Leu Met Asp Asp Ile Arg Cys Lys Arg Tyr Thr Leu
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Arg Lys Val Met Val Asn Gly Asp Ile Pro Pro Arg Leu Lys Lys Ser
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Ala His Glu Ile Ile Leu Asp Phe Ile Arg Ser Arg Pro Pro Leu Asn
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Pro Val Ser Ala Arg Lys Leu Lys Pro Thr Pro Pro Arg Pro Arg Ser
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Leu His Glu Arg Ile Leu Glu Glu Ile Lys Ala Glu Arg Lys Leu Arg
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Pro Val Ser Pro Glu Glu Ile Arg Arg Ser Arg Leu Asp Val Thr Thr
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Glu Thr Pro Thr Asn Val Arg Gln Phe Leu Pro Pro Ser Arg Gln Ser
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Ser Arg Ser Leu Glu Glu Phe Cys Tyr Pro Val Glu Cys Leu Ala Leu
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Leu Glu Lys Tyr Gln Gln Tyr Lys Asp Ile Tyr Thr Ala Leu Lys Lys
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Gly Lys Leu Cys Phe Cys Cys Arg Thr Arg Arg Phe Ser Phe Phe Thr
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Trp Ser Tyr Thr Cys Gln Phe Cys Lys Arg Pro Val Cys Ser Gln Cys
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Cys Lys Lys Met Arg Leu Pro Ser Lys Pro Tyr Ser Thr Leu Pro Ile

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 465 470 475 480  
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 485 490 495  
 Val Asp Cys Lys Lys Phe Ile Ser Glu Ile Ile Ser Ser Ser Arg Arg  
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 <213> Homo sapiens

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 420  
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 449

<210> 2758  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 2758  
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 1 5 10 15  
 Gln Asp His Ser Ser Leu Asn Pro Gln Lys Trp His Cys Val Asp Cys  
 20 25 30  
 Asn Thr Thr Glu Ser Ile Trp Ala Cys Leu Ser Cys Ser His Val Ala  
 35 40 45  
 Cys Gly Arg Tyr Ile Glu Glu His Ala Leu Lys His Phe Gln Glu Ser

50	55	60
Ser His Pro Val Ala Leu Glu Val Asn Glu Met Tyr Val Phe Cys Tyr		
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Leu Cys		80

<210> 2759  
 <211> 688  
 <212> DNA  
 <213> Homo sapiens

<400> 2759  
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 120  
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 240  
 accatcctgg agtgattcca actcaactca aaggacaccc agagctgcca tctggtatct  
 300  
 gccagttttt ccaaagacc tgtaccctac ccagtaccct gctccccctt tcccataatt  
 360  
 catgacatca aaacatcagc ttttcacctt ttccttgaga ctcaggaggg ccaaagcaac  
 420  
 agcctttggc ttttttctct ttttcttccc tctcccctag catggggtga aggaaggag  
 480  
 ccattccttac tgttcagaga cagcaactcc ctcccgtaac tcaggctgag aaggaaccag  
 540  
 ccagctctta cctcctcctg gttgcttttc ttgccccac cccaagttaa ttttggtttt  
 600  
 ccccgggccc cctacctctg aagccatttt atgatctgtc atgtgccacc tgagcctcca  
 660  
 gtaaaaacaa aaacaggaaa aaaaaaaaa  
 688

<210> 2760  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 2760  
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 1 5 10 15  
 Gly Gly Asp Gly Glu Thr Lys Pro Ser Gln Gly Pro Ala Asp Gly Ser  
 20 25 30  
 Arg Pro Glu Pro Gln Arg Pro Arg Asn Arg Pro Tyr Phe Gln Arg Arg  
 35 40 45  
 Arg Gln Gln Ala Pro Gly Pro Gln Gln Ala Pro Gly Pro Arg Gln Pro  
 50 55 60  
 Ala Ala Pro Glu Thr Ser Ala Pro Val Asn Ser Gly Asp Pro Thr Thr  
 65 70 75 80  
 Thr Ile Leu Glu

<210> 2761  
 <211> 922  
 <212> DNA  
 <213> Homo sapiens

<400> 2761  
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 agtattgaac cagggggaat agacattacc cttagtagtt ctctttccca ggcggtgat  
 120  
 ccataactg agggcaataa agagccagat aagacctggg tgaaaaaggg agagcccctc  
 180  
 ccggtaaaac tgaactcttc tacagaagca aatgtgatta aagaggctct agactcctct  
 240  
 ttggaatcta ctctggacaa cagctgtcaa ggtgcacaaa tggataataa atctgaagtt  
 300  
 cagttgtggc tgttaaagag aattcaggta cccattgaag atatacttcc ttcaaaagaa  
 360  
 gaaaaaagca agaccccacc catgttcctg tgcacaaag tgggaaaacc aatgagaaaa  
 420  
 tcctttgcca ctacactgc agccatggtc cagcagtacg gcaaacggag aaagcagcca  
 480  
 gagtactggc ttgctgttcc tcgggagagg gtggatcatt tgtacacatt ctttgttcag  
 540  
 tggctctccg atgtctatgg aaaagatgcc aaagagcaag gctttgtggc ggtggagaag  
 600  
 gaagaactga acatgattga caacttcttc agtgagccaa caaccaagag ctgggagatc  
 660  
 atcactgttg aagaggcaaa gcgcaggaag agcacatgca gctactatga agacgaggac  
 720  
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 780  
 cgctgggccc gcccctttcc tgcaagggtg caagggtatc catggagact ggcctatagc  
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<210> 2762  
 <211> 307  
 <212> PRT  
 <213> Homo sapiens

<400> 2762  
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 Ser Asp Gly Lys Ser Ile Glu Pro Gly Gly Ile Asp Ile Thr Leu Ser  
 20 25 30  
 Ser Ser Leu Ser Gln Ala Gly Asp Pro Ile Thr Glu Gly Asn Lys Glu  
 35 40 45  
 Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu